



# City of Austin

## Purchasing Office

P.O. Box 1088, Austin, TX 78767

November 1, 2018

Stearns Conrad and Schmidt Consulting Engineers Inc  
Ronald Wilks  
Vice President  
8107 Springdale Road, Suite 108  
Austin, TX 78724

Dear Ron:

The Austin City Council approved the execution of a contract with your company for landfill gas collection services in accordance with the referenced solicitation.

Responsible Department:	Austin Resource Recovery
Department Contact Person:	Conley Leloux
Department Contact Email Address:	<a href="mailto:Conley.leloux@austintexas.gov">Conley.leloux@austintexas.gov</a>
Department Contact Telephone:	512-974-4315
Project Name:	Landfill Gas Collection Services
Contractor Name:	Stearns Conrad and Schmidt Consulting Engineers Inc
Contract Number:	MA 1500 NA190000026
Contract Period:	11/1/2018 – 10/31/2021
Dollar Amount	\$600,000
Extension Options:	Two 12-month options at \$200,000/option
Requisition Number:	RQM 1500 18042500455
Solicitation Type & Number:	RFP 1500 SLW3000
Agenda Item Number:	16
Council Approval Date:	11/1/2018

Thank you for your interest in doing business with the City of Austin. If you have any questions regarding this contract, please contact the person referenced under Department Contact Person.

Sincerely,

Sandy Wirtanen  
Procurement Specialist IV  
City of Austin  
Purchasing Office

**CONTRACT BETWEEN THE CITY OF AUSTIN ("City")  
AND  
Stearns Conrad and Schmidt Consulting Engineers Inc ("Contractor")  
for  
Landfill Gas Collection Services  
MA 1500 NA190000026**

The City accepts the Contractor's Offer (as referenced in Section 1.1.3 below) for the above requirement and enters into the following Contract.

This Contract is between Stearns Conrad and Schmidt Consulting Engineers Inc having offices at Austin, TX 78724 and the City, a home-rule municipality incorporated by the State of Texas, and is effective as of the date executed by the City ("Effective Date").

Capitalized terms used but not defined herein have the meanings given them in Solicitation Number RFP 1500 SLW3000.

**1.1 This Contract is composed of the following documents:**

- 1.1.1 This Contract
- 1.1.2 The City's Solicitation, RFP, 1500 SLW3000 including all documents incorporated by reference
- 1.1.3 Stearns Conrad and Schmidt Consulting Engineers Inc's Offer, dated June 5, 2018, including subsequent clarifications

**1.2 Order of Precedence.** Any inconsistency or conflict in the Contract documents shall be resolved by giving precedence in the following order:

- 1.2.1 This Contract
- 1.2.2 The City's Solicitation as referenced in Section 1.1.2, including all documents incorporated by reference
- 1.2.3 The Contractor's Offer as referenced in Section 1.1.3, including subsequent clarifications.

**1.3 Term of Contract.** The Contract shall commence upon execution, unless otherwise specified, and shall remain in effect for an initial term of 36 months. The Contract may be extended beyond the initial term for up to two additional 12 month periods at the City's sole option.

- 1.3.1 If the City exercises any extension option, all terms, conditions, and provisions of the Contract shall remain in effect for that extension period, subject only to any economic price adjustment otherwise allowed under the Contract.
- 1.3.2 Upon expiration of the initial term or any period of extension, the Contractor agrees to hold over under the terms and conditions of this Contract for such a period of time as is reasonably necessary for the City to re-solicit and/or complete the deliverables due under the Contract (not to exceed 120 calendar days unless mutually agreed to in writing).
- 1.3.3 This is a 36 month Contract. Prices are firm for the first twelve (12) months.

**1.4 Compensation.** The Contractor shall be paid a total Not-to-Exceed amount of \$600,000 for the initial Contract term and \$200,000 for each extension option as indicated in the Price Sheet, RFP Section 0600A. Payment shall be made upon successful completion of services or delivery of goods as outlined in each individual Delivery Order.

**1.5 Quantity of Work.** There is no guaranteed quantity of work for the period of the Contract and there are no minimum order quantities. Work will be on an as needed basis as specified by the City for each Delivery Order

This Contract (including any Exhibits) constitutes the entire agreement of the parties regarding the subject matter of this Contract and supersedes all prior and contemporaneous agreements and understandings, whether written or oral, relating to such subject matter. This Contract may be altered, amended, or modified only by a written instrument signed by the duly authorized representatives of both parties.



In witness whereof, the parties have caused a duly authorized representative to execute this Contract on the date set forth below.

**STEARNS CONRAD AND SCHMIDT  
CONSULTING ENGINEERS INC**

  
Signature


Ronald L. Wilks

\_\_\_\_\_  
Printed Name of Authorized Person  
Vice President

\_\_\_\_\_  
Title  
November 1, 2018

\_\_\_\_\_  
Date

**CITY OF AUSTIN**

  
Signature

\_\_\_\_\_  
Sandy Wirtanen  
Printed Name of Authorized Person

\_\_\_\_\_  
Procurement Specialist IV  
Title

11/1/18  
\_\_\_\_\_  
Date

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**TAB 1**  
**EXECUTIVE SUMMARY**



## Tab 1 – Executive Summary

### FM 812 Landfill

### Proposal Summary for GCCS O&M, LMS O&M, LFG Migration Monitoring System, and Related Services

Presented To:



#### **CITY OF AUSTIN**

124 West 8<sup>th</sup> Street  
Room 308  
Austin, Texas 78701  
(512) 974-2500

Presented By:

#### **SCS FIELD SERVICES**

8107 Springdale Road  
Suite 108  
Austin, Texas 78724  
(512) 440-1888

June 5, 2018  
Proposal No. 070105218

Offices Nationwide  
[www.scsengineers.com](http://www.scsengineers.com)

## EXECUTIVE SUMMARY

This proposal is provided by Stearns, Conrad, and Schmidt Consulting Engineers, Inc. (dba SCS Field Services [SCS-FS]), in response to a Request for Proposal (RFP) from the City of Austin (COA) for landfill gas collection operations and maintenance and related services at the COA FM-812 Landfill (Site) at 10108 FM-812, Austin, Texas.

### SECTION 1 SUMMATION OF PROPOSAL

As specified in the solicitation, this proposal is organized as follows:

#### **Tab 1 – Executive Summary**

This document is the Executive Summary for this proposal and, as such, provides a summation of the contents of the proposal.

#### **Tab 2 – City of Austin Purchasing Documents**

The documents completed and included under this tab are: Offer Sheet; Section 510 – Exceptions Checklist; Section 0605 – Local Business Presence Identification; Section 0700 – Reference Sheet; Section 0800 – Non-Discrimination and Non-Retaliation Certification; Section 0815 – Living Wages Contractor Certification; Section 0835 – Non-Resident Bidder Provisions; Section 0840 – SDVBE Contractor Certification; Section 0900 – No Goals Utilization Plan; and Addendum Nos. 1 through 3

#### **Tab 3 – Authorized Negotiator**

The name, address, and phone number of the person with SCS-FS authorized to negotiate contract terms and render binding business decisions on contract matters have been provided under this tab.

#### **Tab 4 – Business Organization**

Information related to our organization has been provided under this tab including: full name and address of parent company; branch office performing work; organization type; and state of incorporation.

#### **Tab 5 – Experience**

Documentation of prior experience verifying compliance with the minimum requirements has been provided under this this tab.

#### **Tab 6 – Personnel and Project Management Structure**

An organizational chart and general explanation of how SCS-FS will manage the project, including communications with the COA, is provided under this tab. Also under this tab, the



names, qualifications, work assignments, and work percentages for key SCS-FS personnel assigned to this project have been provided along with resumes.

**Tab 7 – Project Approach**

A work plan for accomplishing the required services is provided under this tab. This work plan provides details of procedures to be followed in performing the services indicated in the scope. A statement of our commitment to comply with applicable rules and regulations and with the terms of the RFP is also provided.

**Tab 8 – Cost Proposal**

This tab contains the completed Form 0600A along with assumptions and conditions.

**Tab 9 – Proposal Acceptance Period**

Under this tab, SCS-FS has confirmed that its proposal is valid for a period of 180 days.

**TAB 2**

**CITY OF AUSTIN  
PURCHASING DOCUMENTS**

**The undersigned, by his/her signature, represents that he/she is submitting a binding offer and is authorized to bind the respondent to fully comply with the solicitation document contained herein. The Respondent, by submitting and signing below, acknowledges that he/she has received and read the entire document packet sections defined above including all documents incorporated by reference, and agrees to be bound by the terms therein.**

Company Name: Stearns, Conrad and Schmidt, Consulting Engineers, Inc.

Company Address: 8107 Springdale Rd., Suite 108

City, State, Zip: Austin, TX 78724

Federal Tax ID No. \_\_\_\_\_

Printed Name of Officer or Authorized Representative: Ronald L. Wilks

Title: Vice President

Signature of Officer or Authorized Representative: 

Date: 6/5/2018

Email Address: rwilks@scsengineers.com

Phone Number: 817-235-4608

**\* Proposal response must be submitted with this signed Offer sheet to be considered for award**

**CITY OF AUSTIN  
PURCHASING OFFICE  
STANDARD PURCHASE TERMS AND CONDITIONS**

By submitting an Offer in response to the Solicitation, the Contractor agrees that the Contract shall be governed by the following terms and conditions. Unless otherwise specified in the Contract, Sections 3, 4, 5, 6, 7, 8, 20, 21, and 36 shall apply only to a Solicitation to purchase Goods, and Sections 9, 10, 11 and 22 shall apply only to a Solicitation to purchase Services to be performed principally at the City's premises or on public rights-of-way.

1. **CONTRACTOR'S OBLIGATIONS**. The Contractor shall fully and timely provide all Deliverables described in the Solicitation and in the Contractor's Offer in strict accordance with the terms, covenants, and conditions of the Contract and all applicable Federal, State, and local laws, rules, and regulations.
2. **EFFECTIVE DATE/TERM**. Unless otherwise specified in the Solicitation, this Contract shall be effective as of the date the contract is signed by the City, and shall continue in effect until all obligations are performed in accordance with the Contract.
3. **CONTRACTOR TO PACKAGE DELIVERABLES**: The Contractor will package Deliverables in accordance with good commercial practice and shall include a packing list showing the description of each item, the quantity and unit price. Unless otherwise provided in the Specifications or Supplemental Terms and Conditions, each shipping container shall be clearly and permanently marked as follows: (a) The Contractor's name and address, (b) the City's name, address and purchase order or purchase release number and the price agreement number if applicable, (c) Container number and total number of containers, e.g. box 1 of 4 boxes, and (d) the number of the container bearing the packing list. The Contractor shall bear cost of packaging. Deliverables shall be suitably packed to secure lowest transportation costs and to conform with requirements of common carriers and any applicable specifications. The City's count or weight shall be final and conclusive on shipments not accompanied by packing lists.
4. **SHIPMENT UNDER RESERVATION PROHIBITED**: The Contractor is not authorized to ship the Deliverables under reservation and no tender of a bill of lading will operate as a tender of Deliverables.
5. **TITLE & RISK OF LOSS**: Title to and risk of loss of the Deliverables shall pass to the City only when the City actually receives and accepts the Deliverables.
6. **DELIVERY TERMS AND TRANSPORTATION CHARGES**: Deliverables shall be shipped F.O.B. point of delivery unless otherwise specified in the Supplemental Terms and Conditions. Unless otherwise stated in the Offer, the Contractor's price shall be deemed to include all delivery and transportation charges. The City shall have the right to designate what method of transportation shall be used to ship the Deliverables. The place of delivery shall be that set forth in the block of the purchase order or purchase release entitled "Receiving Agency".
7. **RIGHT OF INSPECTION AND REJECTION**: The City expressly reserves all rights under law, including, but not limited to the Uniform Commercial Code, to inspect the Deliverables at delivery before accepting them, and to reject defective or non-conforming Deliverables. If the City has the right to inspect the Contractor's, or the Contractor's Subcontractor's, facilities, or the Deliverables at the Contractor's, or the Contractor's Subcontractor's, premises, the Contractor shall furnish, or cause to be furnished, without additional charge, all reasonable facilities and assistance to the City to facilitate such inspection.
8. **NO REPLACEMENT OF DEFECTIVE TENDER**: Every tender or delivery of Deliverables must fully comply with all provisions of the Contract as to time of delivery, quality, and quantity. Any non-complying tender shall constitute a breach and the Contractor shall not have the right to substitute a conforming tender; provided, where the time for performance has not yet expired, the Contractor may notify the City of the intention to cure and may then make a conforming tender within the time allotted in the contract.
9. **PLACE AND CONDITION OF WORK**: The City shall provide the Contractor access to the sites where the Contractor is to perform the services as required in order for the Contractor to perform the services in a timely and efficient manner, in accordance with and subject to the applicable security laws, rules, and regulations. The Contractor acknowledges that it has satisfied itself as to the nature of the City's service requirements and specifications, the location and essential characteristics of the work sites, the quality and quantity of materials, equipment, labor and facilities necessary to perform the services, and any other condition or state of fact which could in any way affect performance of the Contractor's obligations under the contract. The Contractor hereby releases and holds the City

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harmless from and against any liability or claim for damages of any kind or nature if the actual site or service conditions differ from expected conditions.

**10. WORKFORCE**

- A. The Contractor shall employ only orderly and competent workers, skilled in the performance of the services which they will perform under the Contract.
- B. The Contractor, its employees, subcontractors, and subcontractor's employees may not while engaged in participating or responding to a solicitation or while in the course and scope of delivering goods or services under a City of Austin contract or on the City's property .
  - i. use or possess a firearm, including a concealed handgun that is licensed under state law, except as required by the terms of the contract; or
  - ii. use or possess alcoholic or other intoxicating beverages, illegal drugs or controlled substances, nor may such workers be intoxicated, or under the influence of alcohol or drugs, on the job.
- C. If the City or the City's representative notifies the Contractor that any worker is incompetent, disorderly or disobedient, has knowingly or repeatedly violated safety regulations, has possessed any firearms, or has possessed or was under the influence of alcohol or drugs on the job, the Contractor shall immediately remove such worker from Contract services, and may not employ such worker again on Contract services without the City's prior written consent.

- 11. COMPLIANCE WITH HEALTH, SAFETY, AND ENVIRONMENTAL REGULATIONS:** The Contractor, its Subcontractors, and their respective employees, shall comply fully with all applicable federal, state, and local health, safety, and environmental laws, ordinances, rules and regulations in the performance of the services, including but not limited to those promulgated by the City and by the Occupational Safety and Health Administration (OSHA). In case of conflict, the most stringent safety requirement shall govern. The Contractor shall indemnify and hold the City harmless from and against all claims, demands, suits, actions, judgments, fines, penalties and liability of every kind arising from the breach of the Contractor's obligations under this paragraph.

**12. INVOICES:**

- A. The Contractor shall submit separate invoices in duplicate on each purchase order or purchase release after each delivery. If partial shipments or deliveries are authorized by the City, a separate invoice must be sent for each shipment or delivery made.
- B. **Proper Invoices must include a unique invoice number, the purchase order or delivery order number and the master agreement number if applicable, the Department's Name, and the name of the point of contact for the Department.** Invoices shall be itemized and transportation charges, if any, shall be listed separately. A copy of the bill of lading and the freight waybill, when applicable, shall be attached to the invoice. The Contractor's name and, if applicable, the tax identification number on the invoice must exactly match the information in the Vendor's registration with the City. Unless otherwise instructed in writing, the City may rely on the remittance address specified on the Contractor's invoice.
- C. Invoices for labor shall include a copy of all time-sheets with trade labor rate and Deliverables order number clearly identified. Invoices shall also include a tabulation of work-hours at the appropriate rates and grouped by work order number. Time billed for labor shall be limited to hours actually worked at the work site.
- D. Unless otherwise expressly authorized in the Contract, the Contractor shall pass through all Subcontract and other authorized expenses at actual cost without markup.
- E. Federal excise taxes, State taxes, or City sales taxes must not be included in the invoiced amount. The City will furnish a tax exemption certificate upon request.



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**13. PAYMENT:**

- A. All proper invoices received by the City will be paid within thirty (30) calendar days of the City's receipt of the Deliverables or of the invoice, whichever is later.
- B. **If payment is not timely made, (per paragraph A), interest shall accrue on the unpaid balance at the lesser of the rate specified in Texas Government Code Section 2251.025 or the maximum lawful rate; except, if payment is not timely made for a reason for which the City may withhold payment hereunder, interest shall not accrue until ten (10) calendar days after the grounds for withholding payment have been resolved.**
- C. If partial shipments or deliveries are authorized by the City, the Contractor will be paid for the partial shipment or delivery, as stated above, provided that the invoice matches the shipment or delivery.
- D. The City may withhold or set off the entire payment or part of any payment otherwise due the Contractor to such extent as may be necessary on account of:
  - i. delivery of defective or non-conforming Deliverables by the Contractor;
  - ii. third party claims, which are not covered by the insurance which the Contractor is required to provide, are filed or reasonable evidence indicating probable filing of such claims;
  - iii. failure of the Contractor to pay Subcontractors, or for labor, materials or equipment;
  - iv. damage to the property of the City or the City's agents, employees or contractors, which is not covered by insurance required to be provided by the Contractor;
  - v. reasonable evidence that the Contractor's obligations will not be completed within the time specified in the Contract, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay;
  - vi. failure of the Contractor to submit proper invoices with all required attachments and supporting documentation; or
  - vii. failure of the Contractor to comply with any material provision of the Contract Documents.
- E. Notice is hereby given of Article VIII, Section 1 of the Austin City Charter which prohibits the payment of any money to any person, firm or corporation who is in arrears to the City for taxes, and of §2-8-3 of the Austin City Code concerning the right of the City to offset indebtedness owed the City.
- F. Payment will be made by check unless the parties mutually agree to payment by credit card or electronic transfer of funds. The Contractor agrees that there shall be no additional charges, surcharges, or penalties to the City for payments made by credit card or electronic funds transfer.
- G. The awarding or continuation of this contract is dependent upon the availability of funding. The City's payment obligations are payable only and solely from funds Appropriated and available for this contract. The absence of Appropriated or other lawfully available funds shall render the Contract null and void to the extent funds are not Appropriated or available and any Deliverables delivered but unpaid shall be returned to the Contractor. The City shall provide the Contractor written notice of the failure of the City to make an adequate Appropriation for any fiscal year to pay the amounts due under the Contract, or the reduction of any Appropriation to an amount insufficient to permit the City to pay its obligations under the Contract. In the event of non or inadequate appropriation of funds, there will be no penalty nor removal fees charged to the City.

- 14. TRAVEL EXPENSES:** All travel, lodging and per diem expenses in connection with the Contract for which reimbursement may be claimed by the Contractor under the terms of the Solicitation will be reviewed against the City's Travel Policy as published and maintained by the City's Controller's Office and the Current United States General Services Administration Domestic Per Diem Rates (the "Rates") as published and maintained on the Internet at:

<http://www.gsa.gov/portal/category/21287>

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No amounts in excess of the Travel Policy or Rates shall be paid. All invoices must be accompanied by copies of detailed itemized receipts (e.g. hotel bills, airline tickets). No reimbursement will be made for expenses not actually incurred. Airline fares in excess of coach or economy will not be reimbursed. Mileage charges may not exceed the amount permitted as a deduction in any year under the Internal Revenue Code or Regulations.

**15. FINAL PAYMENT AND CLOSE-OUT:**

- A. If an MBE/WBE Program Compliance Plan is required by the Solicitation, and the Contractor has identified Subcontractors, the Contractor is required to submit a Contract Close-Out MBE/WBE Compliance Report to the Project manager or Contract manager no later than the 15th calendar day after completion of all work under the contract. Final payment, retainage, or both may be withheld if the Contractor is not in compliance with the requirements of the Compliance Plan as accepted by the City.
- B. The making and acceptance of final payment will constitute:
  - i. a waiver of all claims by the City against the Contractor, except claims (1) which have been previously asserted in writing and not yet settled, (2) arising from defective work appearing after final inspection, (3) arising from failure of the Contractor to comply with the Contract or the terms of any warranty specified herein, (4) arising from the Contractor's continuing obligations under the Contract, including but not limited to indemnity and warranty obligations, or (5) arising under the City's right to audit; and
  - ii. a waiver of all claims by the Contractor against the City other than those previously asserted in writing and not yet settled.

**16. SPECIAL TOOLS & TEST EQUIPMENT:** If the price stated on the Offer includes the cost of any special tooling or special test equipment fabricated or required by the Contractor for the purpose of filling this order, such special tooling equipment and any process sheets related thereto shall become the property of the City and shall be identified by the Contractor as such.

**17. AUDITS and RECORDS:**

- A. The Contractor agrees that the representatives of the Office of the City Auditor or other authorized representatives of the City shall have access to, and the right to audit, examine, or reproduce, any and all records of the Contractor related to the performance under this Contract. The Contractor shall retain all such records for a period of three (3) years after final payment on this Contract or until all audit and litigation matters that the City has brought to the attention of the Contractor are resolved, whichever is longer. The Contractor agrees to refund to the City any overpayments disclosed by any such audit.
- B. Records Retention:
  - i. Contractor is subject to City Code chapter 2-11 (Records Management), and as it may subsequently be amended. For purposes of this subsection, a Record means all books, accounts, reports, files, and other data recorded or created by a Contractor in fulfillment of the Contract whether in digital or physical format, except a record specifically relating to the Contractor's internal administration.
  - ii. All Records are the property of the City. The Contractor may not dispose of or destroy a Record without City authorization and shall deliver the Records, in all requested formats and media, along with all finding aids and metadata, to the City at no cost when requested by the City
  - iii. The Contractor shall retain all Records for a period of three (3) years after final payment on this Contract or until all audit and litigation matters that the City has brought to the attention of the Contractor are resolved, whichever is longer.
- C. The Contractor shall include sections A and B above in all subcontractor agreements entered into in connection with this Contract.

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**18. SUBCONTRACTORS:**

- A. If the Contractor identified Subcontractors in an MBE/WBE Program Compliance Plan or a No Goals Utilization Plan the Contractor shall comply with the provisions of Chapters 2-9A, 2-9B, 2-9C, and 2-9D, as applicable, of the Austin City Code and the terms of the Compliance Plan or Utilization Plan as approved by the City (the "Plan"). The Contractor shall not initially employ any Subcontractor except as provided in the Contractor's Plan. The Contractor shall not substitute any Subcontractor identified in the Plan, unless the substitute has been accepted by the City in writing in accordance with the provisions of Chapters 2-9A, 2-9B, 2-9C and 2-9D, as applicable. No acceptance by the City of any Subcontractor shall constitute a waiver of any rights or remedies of the City with respect to defective Deliverables provided by a Subcontractor. If a Plan has been approved, the Contractor is additionally required to submit a monthly Subcontract Awards and Expenditures Report to the Contract Manager and the Purchasing Office Contract Compliance Manager no later than the tenth calendar day of each month.
- B. Work performed for the Contractor by a Subcontractor shall be pursuant to a written contract between the Contractor and Subcontractor. The terms of the subcontract may not conflict with the terms of the Contract, and shall contain provisions that:
  - i. require that all Deliverables to be provided by the Subcontractor be provided in strict accordance with the provisions, specifications and terms of the Contract;
  - ii. prohibit the Subcontractor from further subcontracting any portion of the Contract without the prior written consent of the City and the Contractor. The City may require, as a condition to such further subcontracting, that the Subcontractor post a payment bond in form, substance and amount acceptable to the City;
  - iii. require Subcontractors to submit all invoices and applications for payments, including any claims for additional payments, damages or otherwise, to the Contractor in sufficient time to enable the Contractor to include same with its invoice or application for payment to the City in accordance with the terms of the Contract;
  - iv. require that all Subcontractors obtain and maintain, throughout the term of their contract, insurance in the type and amounts specified for the Contractor, with the City being a named insured as its interest shall appear; and
  - v. require that the Subcontractor indemnify and hold the City harmless to the same extent as the Contractor is required to indemnify the City.
- C. The Contractor shall be fully responsible to the City for all acts and omissions of the Subcontractors just as the Contractor is responsible for the Contractor's own acts and omissions. Nothing in the Contract shall create for the benefit of any such Subcontractor any contractual relationship between the City and any such Subcontractor, nor shall it create any obligation on the part of the City to pay or to see to the payment of any moneys due any such Subcontractor except as may otherwise be required by law.
- D. The Contractor shall pay each Subcontractor its appropriate share of payments made to the Contractor not later than ten (10) calendar days after receipt of payment from the City.

**19. WARRANTY-PRICE:**

- A. The Contractor warrants the prices quoted in the Offer are no higher than the Contractor's current prices on orders by others for like Deliverables under similar terms of purchase.
- B. The Contractor certifies that the prices in the Offer have been arrived at independently without consultation, communication, or agreement for the purpose of restricting competition, as to any matter relating to such fees with any other firm or with any competitor.
- C. In addition to any other remedy available, the City may deduct from any amounts owed to the Contractor, or otherwise recover, any amounts paid for items in excess of the Contractor's current prices on orders by others for like Deliverables under similar terms of purchase.

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20. **WARRANTY – TITLE:** The Contractor warrants that it has good and indefeasible title to all Deliverables furnished under the Contract, and that the Deliverables are free and clear of all liens, claims, security interests and encumbrances. The Contractor shall indemnify and hold the City harmless from and against all adverse title claims to the Deliverables.
21. **WARRANTY – DELIVERABLES:** The Contractor warrants and represents that all Deliverables sold the City under the Contract shall be free from defects in design, workmanship or manufacture, and conform in all material respects to the specifications, drawings, and descriptions in the Solicitation, to any samples furnished by the Contractor, to the terms, covenants and conditions of the Contract, and to all applicable State, Federal or local laws, rules, and regulations, and industry codes and standards. Unless otherwise stated in the Solicitation, the Deliverables shall be new or recycled merchandise, and not used or reconditioned.
- A. Recycled Deliverables shall be clearly identified as such.
  - B. The Contractor may not limit, exclude or disclaim the foregoing warranty or any warranty implied by law; and any attempt to do so shall be without force or effect.
  - C. Unless otherwise specified in the Contract, the warranty period shall be at least one year from the date of acceptance of the Deliverables or from the date of acceptance of any replacement Deliverables. If during the warranty period, one or more of the above warranties are breached, the Contractor shall promptly upon receipt of demand either repair the non-conforming Deliverables, or replace the non-conforming Deliverables with fully conforming Deliverables, at the City's option and at no additional cost to the City. All costs incidental to such repair or replacement, including but not limited to, any packaging and shipping costs, shall be borne exclusively by the Contractor. The City shall endeavor to give the Contractor written notice of the breach of warranty within thirty (30) calendar days of discovery of the breach of warranty, but failure to give timely notice shall not impair the City's rights under this section.
  - D. If the Contractor is unable or unwilling to repair or replace defective or non-conforming Deliverables as required by the City, then in addition to any other available remedy, the City may reduce the quantity of Deliverables it may be required to purchase under the Contract from the Contractor, and purchase conforming Deliverables from other sources. In such event, the Contractor shall pay to the City upon demand the increased cost, if any, incurred by the City to procure such Deliverables from another source.
  - E. If the Contractor is not the manufacturer, and the Deliverables are covered by a separate manufacturer's warranty, the Contractor shall transfer and assign such manufacturer's warranty to the City. If for any reason the manufacturer's warranty cannot be fully transferred to the City, the Contractor shall assist and cooperate with the City to the fullest extent to enforce such manufacturer's warranty for the benefit of the City.
22. **WARRANTY – SERVICES:** The Contractor warrants and represents that all services to be provided the City under the Contract will be fully and timely performed in a good and workmanlike manner in accordance with generally accepted industry standards and practices, the terms, conditions, and covenants of the Contract, and all applicable Federal, State and local laws, rules or regulations.
- A. The Contractor may not limit, exclude or disclaim the foregoing warranty or any warranty implied by law, and any attempt to do so shall be without force or effect.
  - B. Unless otherwise specified in the Contract, the warranty period shall be at least one year from the Acceptance Date. If during the warranty period, one or more of the above warranties are breached, the Contractor shall promptly upon receipt of demand perform the services again in accordance with above standard at no additional cost to the City. All costs incidental to such additional performance shall be borne by the Contractor. The City shall endeavor to give the Contractor written notice of the breach of warranty within thirty (30) calendar days of discovery of the breach warranty, but failure to give timely notice shall not impair the City's rights under this section.
  - C. If the Contractor is unable or unwilling to perform its services in accordance with the above standard as required by the City, then in addition to any other available remedy, the City may reduce the amount of services it may be

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required to purchase under the Contract from the Contractor, and purchase conforming services from other sources. In such event, the Contractor shall pay to the City upon demand the increased cost, if any, incurred by the City to procure such services from another source.

23. **ACCEPTANCE OF INCOMPLETE OR NON-CONFORMING DELIVERABLES:** If, instead of requiring immediate correction or removal and replacement of defective or non-conforming Deliverables, the City prefers to accept it, the City may do so. The Contractor shall pay all claims, costs, losses and damages attributable to the City's evaluation of and determination to accept such defective or non-conforming Deliverables. If any such acceptance occurs prior to final payment, the City may deduct such amounts as are necessary to compensate the City for the diminished value of the defective or non-conforming Deliverables. If the acceptance occurs after final payment, such amount will be refunded to the City by the Contractor.
24. **RIGHT TO ASSURANCE:** Whenever one party to the Contract in good faith has reason to question the other party's intent to perform, demand may be made to the other party for written assurance of the intent to perform. In the event that no assurance is given within the time specified after demand is made, the demanding party may treat this failure as an anticipatory repudiation of the Contract.
25. **STOP WORK NOTICE:** The City may issue an immediate Stop Work Notice in the event the Contractor is observed performing in a manner that is in violation of Federal, State, or local guidelines, or in a manner that is determined by the City to be unsafe to either life or property. Upon notification, the Contractor will cease all work until notified by the City that the violation or unsafe condition has been corrected. The Contractor shall be liable for all costs incurred by the City as a result of the issuance of such Stop Work Notice.
26. **DEFAULT:** The Contractor shall be in default under the Contract if the Contractor (a) fails to fully, timely and faithfully perform any of its material obligations under the Contract, (b) fails to provide adequate assurance of performance under Paragraph 24, (c) becomes insolvent or seeks relief under the bankruptcy laws of the United States or (d) makes a material misrepresentation in Contractor's Offer, or in any report or deliverable required to be submitted by the Contractor to the City.
27. **TERMINATION FOR CAUSE:** In the event of a default by the Contractor, the City shall have the right to terminate the Contract for cause, by written notice effective ten (10) calendar days, unless otherwise specified, after the date of such notice, unless the Contractor, within such ten (10) day period, cures such default, or provides evidence sufficient to prove to the City's reasonable satisfaction that such default does not, in fact, exist. The City may place Contractor on probation for a specified period of time within which the Contractor must correct any non-compliance issues. Probation shall not normally be for a period of more than nine (9) months, however, it may be for a longer period, not to exceed one (1) year depending on the circumstances. If the City determines the Contractor has failed to perform satisfactorily during the probation period, the City may proceed with suspension. In the event of a default by the Contractor, the City may suspend or debar the Contractor in accordance with the "City of Austin Purchasing Office Probation, Suspension and Debarment Rules for Vendors" and remove the Contractor from the City's vendor list for up to five (5) years and any Offer submitted by the Contractor may be disqualified for up to five (5) years. In addition to any other remedy available under law or in equity, the City shall be entitled to recover all actual damages, costs, losses and expenses, incurred by the City as a result of the Contractor's default, including, without limitation, cost of cover, reasonable attorneys' fees, court costs, and prejudgment and post-judgment interest at the maximum lawful rate. All rights and remedies under the Contract are cumulative and are not exclusive of any other right or remedy provided by law.
28. **TERMINATION WITHOUT CAUSE:** The City shall have the right to terminate the Contract, in whole or in part, without cause any time upon thirty (30) calendar days' prior written notice. Upon receipt of a notice of termination, the Contractor shall promptly cease all further work pursuant to the Contract, with such exceptions, if any, specified in the notice of termination. The City shall pay the Contractor, to the extent of funds Appropriated or otherwise legally available for such purposes, for all goods delivered and services performed and obligations incurred prior to the date of termination in accordance with the terms hereof.
29. **FRAUD:** Fraudulent statements by the Contractor on any Offer or in any report or deliverable required to be submitted by the Contractor to the City shall be grounds for the termination of the Contract for cause by the City and may result in legal action.



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**30. DELAYS:**

- A. The City may delay scheduled delivery or other due dates by written notice to the Contractor if the City deems it is in its best interest. If such delay causes an increase in the cost of the work under the Contract, the City and the Contractor shall negotiate an equitable adjustment for costs incurred by the Contractor in the Contract price and execute an amendment to the Contract. The Contractor must assert its right to an adjustment within thirty (30) calendar days from the date of receipt of the notice of delay. Failure to agree on any adjusted price shall be handled under the Dispute Resolution process specified in paragraph 48. However, nothing in this provision shall excuse the Contractor from delaying the delivery as notified.
- B. Neither party shall be liable for any default or delay in the performance of its obligations under this Contract if, while and to the extent such default or delay is caused by acts of God, fire, riots, civil commotion, labor disruptions, sabotage, sovereign conduct, or any other cause beyond the reasonable control of such Party. In the event of default or delay in contract performance due to any of the foregoing causes, then the time for completion of the services will be extended; provided, however, in such an event, a conference will be held within three (3) business days to establish a mutually agreeable period of time reasonably necessary to overcome the effect of such failure to perform.

**31. INDEMNITY:**

- A. Definitions:
  - i. "Indemnified Claims" shall include any and all claims, demands, suits, causes of action, judgments and liability of every character, type or description, including all reasonable costs and expenses of litigation, mediation or other alternate dispute resolution mechanism, including attorney and other professional fees for:
    - (1) damage to or loss of the property of any person (including, but not limited to the City, the Contractor, their respective agents, officers, employees and subcontractors; the officers, agents, and employees of such subcontractors; and third parties); and/or
    - (2) death, bodily injury, illness, disease, worker's compensation, loss of services, or loss of income or wages to any person (including but not limited to the agents, officers and employees of the City, the Contractor, the Contractor's subcontractors, and third parties),
  - ii. "Fault" shall include the sale of defective or non-conforming Deliverables, negligence, willful misconduct, or a breach of any legally imposed strict liability standard.
- B. **THE CONTRACTOR SHALL DEFEND (AT THE OPTION OF THE CITY), INDEMNIFY, AND HOLD THE CITY, ITS SUCCESSORS, ASSIGNS, OFFICERS, EMPLOYEES AND ELECTED OFFICIALS HARMLESS FROM AND AGAINST ALL INDEMNIFIED CLAIMS DIRECTLY ARISING OUT OF, INCIDENT TO, CONCERNING OR RESULTING FROM THE FAULT OF THE CONTRACTOR, OR THE CONTRACTOR'S AGENTS, EMPLOYEES OR SUBCONTRACTORS, IN THE PERFORMANCE OF THE CONTRACTOR'S OBLIGATIONS UNDER THE CONTRACT. NOTHING HEREIN SHALL BE DEEMED TO LIMIT THE RIGHTS OF THE CITY OR THE CONTRACTOR (INCLUDING, BUT NOT LIMITED TO, THE RIGHT TO SEEK CONTRIBUTION) AGAINST ANY THIRD PARTY WHO MAY BE LIABLE FOR AN INDEMNIFIED CLAIM.**

**32. INSURANCE:** (reference Section 0400 for specific coverage requirements). The following insurance requirement applies. (Revised March 2013).

- A. General Requirements.
  - i. The Contractor shall at a minimum carry insurance in the types and amounts indicated in Section 0400, Supplemental Purchase Provisions, for the duration of the Contract, including extension options and hold over periods, and during any warranty period.
  - ii. The Contractor shall provide Certificates of Insurance with the coverages and endorsements required in Section 0400, Supplemental Purchase Provisions, to the City as verification of coverage prior to contract execution and within fourteen (14) calendar days after written request from the

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City. Failure to provide the required Certificate of Insurance may subject the Offer to disqualification from consideration for award. The Contractor must also forward a Certificate of Insurance to the City whenever a previously identified policy period has expired, or an extension option or hold over period is exercised, as verification of continuing coverage.

- iii. The Contractor shall not commence work until the required insurance is obtained and until such insurance has been reviewed by the City. Approval of insurance by the City shall not relieve or decrease the liability of the Contractor hereunder and shall not be construed to be a limitation of liability on the part of the Contractor.
- iv. The City may request that the Contractor submit certificates of insurance to the City for all subcontractors prior to the subcontractors commencing work on the project.
- v. The Contractor's and all subcontractors' insurance coverage shall be written by companies licensed to do business in the State of Texas at the time the policies are issued and shall be written by companies with A.M. Best ratings of B+VII or better.
- vi. The "other" insurance clause shall not apply to the City where the City is an additional insured shown on any policy. It is intended that policies required in the Contract, covering both the City and the Contractor, shall be considered primary coverage as applicable.
- vii. If insurance policies are not written for amounts specified in Section 0400, Supplemental Purchase Provisions, the Contractor shall carry Umbrella or Excess Liability Insurance for any differences in amounts specified. If Excess Liability Insurance is provided, it shall follow the form of the primary coverage.
- viii. The City shall be entitled, upon request, at an agreed upon location, and without expense, to review certified copies of policies and endorsements thereto and may make any reasonable requests for deletion or revision or modification of particular policy terms, conditions, limitations, or exclusions except where policy provisions are established by law or regulations binding upon either of the parties hereto or the underwriter on any such policies.
- ix. The City reserves the right to review the insurance requirements set forth during the effective period of the Contract and to make reasonable adjustments to insurance coverage, limits, and exclusions when deemed necessary and prudent by the City based upon changes in statutory law, court decisions, the claims history of the industry or financial condition of the insurance company as well as the Contractor.
- x. The Contractor shall not cause any insurance to be canceled nor permit any insurance to lapse during the term of the Contract or as required in the Contract.
- xi. The Contractor shall be responsible for premiums, deductibles and self-insured retentions, if any, stated in policies. Self-insured retentions shall be disclosed on the Certificate of Insurance.
- xii. The Contractor shall provide the City thirty (30) calendar days' written notice of erosion of the aggregate limits below occurrence limits for all applicable coverages indicated within the Contract.
- xiii. The insurance coverages specified in Section 0400, Supplemental Purchase Provisions, are required minimums and are not intended to limit the responsibility or liability of the Contractor.

**B. Specific Coverage Requirements:** Specific insurance requirements are contained in Section 0400, Supplemental Purchase Provisions

33. **CLAIMS:** If any claim, demand, suit, or other action is asserted against the Contractor which arises under or concerns the Contract, or which could have a material adverse affect on the Contractor's ability to perform thereunder, the Contractor shall give written notice thereof to the City within ten (10) calendar days after receipt of notice by the

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Contractor. Such notice to the City shall state the date of notification of any such claim, demand, suit, or other action; the names and addresses of the claimant(s); the basis thereof; and the name of each person against whom such claim is being asserted. Such notice shall be delivered personally or by mail and shall be sent to the City and to the Austin City Attorney. Personal delivery to the City Attorney shall be to City Hall, 301 West 2<sup>nd</sup> Street, 4<sup>th</sup> Floor, Austin, Texas 78701, and mail delivery shall be to P.O. Box 1088, Austin, Texas 78767.

34. **NOTICES**: Unless otherwise specified, all notices, requests, or other communications required or appropriate to be given under the Contract shall be in writing and shall be deemed delivered three (3) business days after postmarked if sent by U.S. Postal Service Certified or Registered Mail, Return Receipt Requested. Notices delivered by other means shall be deemed delivered upon receipt by the addressee. Routine communications may be made by first class mail, telefax, or other commercially accepted means. Notices to the Contractor shall be sent to the address specified in the Contractor's Offer, or at such other address as a party may notify the other in writing. Notices to the City shall be addressed to the City at P.O. Box 1088, Austin, Texas 78767 and marked to the attention of the Contract Administrator.
35. **RIGHTS TO BID, PROPOSAL AND CONTRACTUAL MATERIAL**: All material submitted by the Contractor to the City shall become property of the City upon receipt. Any portions of such material claimed by the Contractor to be proprietary must be clearly marked as such. Determination of the public nature of the material is subject to the Texas Public Information Act, Chapter 552, Texas Government Code.
36. **NO WARRANTY BY CITY AGAINST INFRINGEMENTS**: The Contractor represents and warrants to the City that: (i) the Contractor shall provide the City good and indefeasible title to the Deliverables and (ii) the Deliverables supplied by the Contractor in accordance with the specifications in the Contract will not infringe, directly or contributorily, any patent, trademark, copyright, trade secret, or any other intellectual property right of any kind of any third party; that no claims have been made by any person or entity with respect to the ownership or operation of the Deliverables and the Contractor does not know of any valid basis for any such claims. The Contractor shall, at its sole expense, defend, indemnify, and hold the City harmless from and against all liability, damages, and costs (including court costs and reasonable fees of attorneys and other professionals) arising out of or resulting from: (i) any claim that the City's exercise anywhere in the world of the rights associated with the City's ownership, and if applicable, license rights, and its use of the Deliverables infringes the intellectual property rights of any third party; or (ii) the Contractor's breach of any of Contractor's representations or warranties stated in this Contract. In the event of any such claim, the City shall have the right to monitor such claim or at its option engage its own separate counsel to act as co-counsel on the City's behalf. Further, Contractor agrees that the City's specifications regarding the Deliverables shall in no way diminish Contractor's warranties or obligations under this paragraph and the City makes no warranty that the production, development, or delivery of such Deliverables will not impact such warranties of Contractor.
37. **CONFIDENTIALITY**: In order to provide the Deliverables to the City, Contractor may require access to certain of the City's and/or its licensors' confidential information (including inventions, employee information, trade secrets, confidential know-how, confidential business information, and other information which the City or its licensors consider confidential) (collectively, "Confidential Information"). Contractor acknowledges and agrees that the Confidential Information is the valuable property of the City and/or its licensors and any unauthorized use, disclosure, dissemination, or other release of the Confidential Information will substantially injure the City and/or its licensors. The Contractor (including its employees, subcontractors, agents, or representatives) agrees that it will maintain the Confidential Information in strict confidence and shall not disclose, disseminate, copy, divulge, recreate, or otherwise use the Confidential Information without the prior written consent of the City or in a manner not expressly permitted under this Agreement, unless the Confidential Information is required to be disclosed by law or an order of any court or other governmental authority with proper jurisdiction, provided the Contractor promptly notifies the City before disclosing such information so as to permit the City reasonable time to seek an appropriate protective order. The Contractor agrees to use protective measures no less stringent than the Contractor uses within its own business to protect its own most valuable information, which protective measures shall under all circumstances be at least reasonable measures to ensure the continued confidentiality of the Confidential Information.
38. **PUBLICATIONS**: All published material and written reports submitted under the Contract must be originally developed material unless otherwise specifically provided in the Contract. When material not originally developed is included in a report in any form, the source shall be identified.

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39. **ADVERTISING**: The Contractor shall not advertise or publish, without the City's prior consent, the fact that the City has entered into the Contract, except to the extent required by law.
40. **NO CONTINGENT FEES**: The Contractor warrants that no person or selling agency has been employed or retained to solicit or secure the Contract upon any agreement or understanding for commission, percentage, brokerage, or contingent fee, excepting bona fide employees of bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business. For breach or violation of this warranty, the City shall have the right, in addition to any other remedy available, to cancel the Contract without liability and to deduct from any amounts owed to the Contractor, or otherwise recover, the full amount of such commission, percentage, brokerage or contingent fee.
41. **GRATUITIES**: The City may, by written notice to the Contractor, cancel the Contract without liability if it is determined by the City that gratuities were offered or given by the Contractor or any agent or representative of the Contractor to any officer or employee of the City of Austin with a view toward securing the Contract or securing favorable treatment with respect to the awarding or amending or the making of any determinations with respect to the performing of such contract. In the event the Contract is canceled by the City pursuant to this provision, the City shall be entitled, in addition to any other rights and remedies, to recover or withhold the amount of the cost incurred by the Contractor in providing such gratuities.
42. **PROHIBITION AGAINST PERSONAL INTEREST IN CONTRACTS**: No officer, employee, independent consultant, or elected official of the City who is involved in the development, evaluation, or decision-making process of the performance of any solicitation shall have a financial interest, direct or indirect, in the Contract resulting from that solicitation. Any willful violation of this section shall constitute impropriety in office, and any officer or employee guilty thereof shall be subject to disciplinary action up to and including dismissal. Any violation of this provision, with the knowledge, expressed or implied, of the Contractor shall render the Contract voidable by the City.
43. **INDEPENDENT CONTRACTOR**: The Contract shall not be construed as creating an employer/employee relationship, a partnership, or a joint venture. The Contractor's services shall be those of an independent contractor. The Contractor agrees and understands that the Contract does not grant any rights or privileges established for employees of the City.
44. **ASSIGNMENT-DELEGATION**: The Contract shall be binding upon and enure to the benefit of the City and the Contractor and their respective successors and assigns, provided however, that no right or interest in the Contract shall be assigned and no obligation shall be delegated by the Contractor without the prior written consent of the City. Any attempted assignment or delegation by the Contractor shall be void unless made in conformity with this paragraph. The Contract is not intended to confer rights or benefits on any person, firm or entity not a party hereto; it being the intention of the parties that there be no third party beneficiaries to the Contract.
45. **WAIVER**: No claim or right arising out of a breach of the Contract can be discharged in whole or in part by a waiver or renunciation of the claim or right unless the waiver or renunciation is supported by consideration and is in writing signed by the aggrieved party. No waiver by either the Contractor or the City of any one or more events of default by the other party shall operate as, or be construed to be, a permanent waiver of any rights or obligations under the Contract, or an express or implied acceptance of any other existing or future default or defaults, whether of a similar or different character.
46. **MODIFICATIONS**: The Contract can be modified or amended only by a writing signed by both parties. No pre-printed or similar terms on any the Contractor invoice, order or other document shall have any force or effect to change the terms, covenants, and conditions of the Contract.
47. **INTERPRETATION**: The Contract is intended by the parties as a final, complete and exclusive statement of the terms of their agreement. No course of prior dealing between the parties or course of performance or usage of the trade shall be relevant to supplement or explain any term used in the Contract. Although the Contract may have been substantially drafted by one party, it is the intent of the parties that all provisions be construed in a manner to be fair to both parties, reading no provisions more strictly against one party or the other. Whenever a term defined by the Uniform Commercial Code, as enacted by the State of Texas, is used in the Contract, the UCC definition shall control, unless otherwise defined in the Contract.

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**48. DISPUTE RESOLUTION:**

- A. If a dispute arises out of or relates to the Contract, or the breach thereof, the parties agree to negotiate prior to prosecuting a suit for damages. However, this section does not prohibit the filing of a lawsuit to toll the running of a statute of limitations or to seek injunctive relief. Either party may make a written request for a meeting between representatives of each party within fourteen (14) calendar days after receipt of the request or such later period as agreed by the parties. Each party shall include, at a minimum, one (1) senior level individual with decision-making authority regarding the dispute. The purpose of this and any subsequent meeting is to attempt in good faith to negotiate a resolution of the dispute. If, within thirty (30) calendar days after such meeting, the parties have not succeeded in negotiating a resolution of the dispute, they will proceed directly to mediation as described below. Negotiation may be waived by a written agreement signed by both parties, in which event the parties may proceed directly to mediation as described below.
- B. If the efforts to resolve the dispute through negotiation fail, or the parties waive the negotiation process, the parties may select, within thirty (30) calendar days, a mediator trained in mediation skills to assist with resolution of the dispute. Should they choose this option, the City and the Contractor agree to act in good faith in the selection of the mediator and to give consideration to qualified individuals nominated to act as mediator. Nothing in the Contract prevents the parties from relying on the skills of a person who is trained in the subject matter of the dispute or a contract interpretation expert. If the parties fail to agree on a mediator within thirty (30) calendar days of initiation of the mediation process, the mediator shall be selected by the Travis County Dispute Resolution Center (DRC). The parties agree to participate in mediation in good faith for up to thirty (30) calendar days from the date of the first mediation session. The City and the Contractor will share the mediator's fees equally and the parties will bear their own costs of participation such as fees for any consultants or attorneys they may utilize to represent them or otherwise assist them in the mediation.

49. **JURISDICTION AND VENUE:** The Contract is made under and shall be governed by the laws of the State of Texas, including, when applicable, the Uniform Commercial Code as adopted in Texas, V.T.C.A., Bus. & Comm. Code, Chapter 1, excluding any rule or principle that would refer to and apply the substantive law of another state or jurisdiction. All issues arising from this Contract shall be resolved in the courts of Travis County, Texas and the parties agree to submit to the exclusive personal jurisdiction of such courts. The foregoing, however, shall not be construed or interpreted to limit or restrict the right or ability of the City to seek and secure injunctive relief from any competent authority as contemplated herein.

50. **INVALIDITY:** The invalidity, illegality, or unenforceability of any provision of the Contract shall in no way affect the validity or enforceability of any other portion or provision of the Contract. Any void provision shall be deemed severed from the Contract and the balance of the Contract shall be construed and enforced as if the Contract did not contain the particular portion or provision held to be void. The parties further agree to reform the Contract to replace any stricken provision with a valid provision that comes as close as possible to the intent of the stricken provision. The provisions of this section shall not prevent this entire Contract from being void should a provision which is the essence of the Contract be determined to be void.

51. **HOLIDAYS:** The following holidays are observed by the City:

<u>Holiday</u>	<u>Date Observed</u>
New Year's Day	January 1
Martin Luther King, Jr.'s Birthday	Third Monday in January
President's Day	Third Monday in February
Memorial Day	Last Monday in May
Independence Day	July 4
Labor Day	First Monday in September
Veteran's Day	November 11



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Thanksgiving Day	Fourth Thursday in November
Friday after Thanksgiving	Friday after Thanksgiving
Christmas Eve	December 24
Christmas Day	December 25

If a Legal Holiday falls on Saturday, it will be observed on the preceding Friday. If a Legal Holiday falls on Sunday, it will be observed on the following Monday.

52. **SURVIVABILITY OF OBLIGATIONS:** All provisions of the Contract that impose continuing obligations on the parties, including but not limited to the warranty, indemnity, and confidentiality obligations of the parties, shall survive the expiration or termination of the Contract.

53. **NON-SUSPENSION OR DEBARMENT CERTIFICATION:**

The City of Austin is prohibited from contracting with or making prime or sub-awards to parties that are suspended or debarred or whose principals are suspended or debarred from Federal, State, or City of Austin Contracts. By accepting a Contract with the City, the Vendor certifies that its firm and its principals are not currently suspended or debarred from doing business with the Federal Government, as indicated by the General Services Administration List of Parties Excluded from Federal Procurement and Non-Procurement Programs, the State of Texas, or the City of Austin.

54. **EQUAL OPPORTUNITY**

- A. **Equal Employment Opportunity:** No Contractor, or Contractor's agent, shall engage in any discriminatory employment practice as defined in Chapter 5-4 of the City Code. No Offer submitted to the City shall be considered, nor any Purchase Order issued, or any Contract awarded by the City unless the Offeror has executed and filed with the City Purchasing Office a current Non-Discrimination Certification. Non-compliance with Chapter 5-4 of the City Code may result in sanctions, including termination of the contract and the Contractor's suspension or debarment from participation on future City contracts until deemed compliant with Chapter 5-4.
- B. **Americans with Disabilities Act (ADA) Compliance:** No Contractor, or Contractor's agent, shall engage in any discriminatory practice against individuals with disabilities as defined in the ADA, including but not limited to: employment, accessibility to goods and services, reasonable accommodations, and effective communications.

55. **BUY AMERICAN ACT-SUPPLIES (Applicable to certain Federally funded requirements)**

- A. Definitions. As used in this paragraph –
- i. "Component" means an article, material, or supply incorporated directly into an end product.
  - ii. "Cost of components" means -
    - (1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the end product (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or
    - (2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the end product.

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- iii. "Domestic end product" means-
  - (1) An unmanufactured end product mined or produced in the United States; or
  - (2) An end product manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind as those that the agency determines are not mined, produced, or manufactured in sufficient and reasonably available commercial quantities of a satisfactory quality are treated as domestic. Scrap generated, collected, and prepared for processing in the United States is considered domestic.
- iv. "End product" means those articles, materials, and supplies to be acquired under the contract for public use.
- v. "Foreign end product" means an end product other than a domestic end product.
- vi. "United States" means the 50 States, the District of Columbia, and outlying areas.
- B. The Buy American Act (41 U.S.C. 10a - 10d) provides a preference for domestic end products for supplies acquired for use in the United States.
- C. The City does not maintain a list of foreign articles that will be treated as domestic for this Contract; but will consider for approval foreign articles as domestic for this product if the articles are on a list approved by another Governmental Agency. The Offeror shall submit documentation with their Offer demonstrating that the article is on an approved Governmental list.
- D. The Contractor shall deliver only domestic end products except to the extent that it specified delivery of foreign end products in the provision of the Solicitation entitled "Buy American Act Certificate".

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The following Supplemental Purchasing Provisions apply to this solicitation:

1. **EXPLANATIONS OR CLARIFICATIONS:** (reference paragraph 5 in Section 0200)

All requests for explanations or clarifications must be submitted in writing to the Purchasing Office by one week prior to the offer closing date by 1:00 PM CST. Any requests should be emailed to [sandy.wirtanen@austintexas.gov](mailto:sandy.wirtanen@austintexas.gov).

2. **INSURANCE:** Insurance is required for this solicitation.

A. **General Requirements:** See Section 0300, Standard Purchase Terms and Conditions, paragraph 32, entitled Insurance, for general insurance requirements.

- i. The Contractor shall provide a Certificate of Insurance as verification of coverages required below to the City at the below address prior to contract execution and within 14 calendar days after written request from the City. Failure to provide the required Certificate of Insurance may subject the Offer to disqualification from consideration for award
- ii. The Contractor shall not commence work until the required insurance is obtained and until such insurance has been reviewed by the City. Approval of insurance by the City shall not relieve or decrease the liability of the Contractor hereunder and shall not be construed to be a limitation of liability on the part of the Contractor.
- iii. The Contractor must also forward a Certificate of Insurance to the City whenever a previously identified policy period has expired, or an extension option or holdover period is exercised, as verification of continuing coverage.
- iv. The Certificate of Insurance, and updates, shall be mailed to the following address:

City of Austin Purchasing Office  
P. O. Box 1088  
Austin, Texas 78767

OR

[PURInsuranceCompliance@austintexas.gov](mailto:PURInsuranceCompliance@austintexas.gov)

B. **Specific Coverage Requirements:** The Contractor shall at a minimum carry insurance in the types and amounts indicated below for the duration of the Contract, including extension options and hold over periods, and during any warranty period. These insurance coverages are required minimums and are not intended to limit the responsibility or liability of the Contractor.

- i. **Worker's Compensation and Employers' Liability Insurance:** Coverage shall be consistent with statutory benefits outlined in the Texas Worker's Compensation Act (Section 401). The minimum policy limits for Employer's Liability are \$100,000 bodily injury each accident, \$500,000 bodily injury by disease policy limit and \$100,000 bodily injury by disease each employee.
  - (1) The Contractor's policy shall apply to the State of Texas and include these endorsements in favor of the City of Austin:
    - (a) Waiver of Subrogation, Form WC420304, or equivalent coverage
    - (b) Thirty (30) days Notice of Cancellation, Form WC420601, or equivalent coverage
- ii. **Commercial General Liability Insurance:** The minimum bodily injury and property damage per occurrence are \$500,000 for coverages A (Bodily Injury and Property Damage) and B (Personal and Advertising Injury).
  - (1) The policy shall contain the following provisions:
    - (a) Contractual liability coverage for liability assumed under the Contract and all other Contracts related to the project.
    - (b) Contractor/Subcontracted Work.

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- (c) Products/Completed Operations Liability for the duration of the warranty period.
      - (d) If the project involves digging or drilling provisions must be included that provide Explosion, Collapse, and/or Underground Coverage.
    - (2) The policy shall also include these endorsements in favor of the City of Austin:
      - (a) Waiver of Subrogation, Endorsement CG 2404, or equivalent coverage
      - (b) Thirty (30) days Notice of Cancellation, Endorsement CG 0205, or equivalent coverage
      - (c) The City of Austin listed as an additional insured, Endorsement CG 2010, or equivalent coverage
  - iii. **Business Automobile Liability Insurance:** The Contractor shall provide coverage for all owned, non-owned and hired vehicles with a minimum combined single limit of \$500,000 per occurrence for bodily injury and property damage. Alternate acceptable limits are \$250,000 bodily injury per person, \$500,000 bodily injury per occurrence and at least \$100,000 property damage liability per accident.
    - (1) The policy shall include these endorsements in favor of the City of Austin:
      - (a) Waiver of Subrogation, Endorsement CA0444, or equivalent coverage
      - (b) Thirty (30) days Notice of Cancellation, Endorsement CA0244, or equivalent coverage
      - (c) The City of Austin listed as an additional insured, Endorsement CA2048, or equivalent coverage.
- C. **Endorsements:** The specific insurance coverage endorsements specified above, or their equivalents must be provided. In the event that endorsements, which are the equivalent of the required coverage, are proposed to be substituted for the required coverage, copies of the equivalent endorsements must be provided for the City's review and approval.
3. **TERM OF CONTRACT:**
- A. The Contract shall commence upon execution, unless otherwise specified, and shall remain in effect for an initial term of 36 months. The Contract may be extended beyond the initial term for up to two additional 12 month periods at the City's sole option. If the City exercises any extension option, all terms, conditions, and provisions of the Contract shall remain in effect for that extension period, subject only to any economic price adjustment otherwise allowed under the Contract.
  - B. Upon expiration of the initial term or any period of extension, the Contractor agrees to hold over under the terms and conditions of this Contract for such a period of time as is reasonably necessary for the City to re-solicit and/or complete the deliverables due under this Contract. Any hold over period will not exceed 120 calendar days unless mutually agreed on by both parties in writing.
  - C. Upon written notice to the Contractor from the City's Purchasing Officer or his designee and acceptance of the Contractor, the term of this contract shall be extended on the same terms and conditions for an additional period as indicated in paragraph A above.
  - D. Prices are firm and fixed for the first 12 months. Thereafter, price changes are subject to the Economic Price Adjustment provisions of this Contract.
4. **QUANTITIES:** The quantities listed herein are estimates for the period of the Contract. The City reserves the right to purchase more or less of these quantities as may be required during the Contract term. Quantities will be as needed and specified by the City for each order. Unless specified in the solicitation, there are no minimum order quantities.
5. **INVOICES and PAYMENT:** (reference paragraphs 12 and 13 in Section 0300)

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- A. Invoices shall contain a unique invoice number and the information required in Section 0300, paragraph 12, entitled "Invoices." Invoices received without all required information cannot be processed and will be returned to the vendor.

Invoices shall be emailed to the Contract Manager and [ARR.AP@austintexas.gov](mailto:ARR.AP@austintexas.gov) on or before the 15<sup>th</sup> of each month for all the services provided the prior month and shall be itemized. Unless otherwise instructed in writing, the City may rely on the remittance address specified on the Contractor's invoice. Invoices shall contain the following information at a minimum or they will not be processed and will be returned to the Contractor

- A unique invoice number;
  - The ARR provided purchase order or delivery order number and the ARR contract number, if applicable;
  - The Department's name, "Austin Resource Recovery";
  - The name of the Contract Manager;
  - The Contractor's name; and
  - If applicable, the tax identification number on the invoice must exactly match the information in the Contractor's registration with the City
- B. The Contractor agrees to accept payment by credit card, check or Electronic Funds Transfer (EFT) for all goods and/or services provided under the Contract. The Contractor shall factor the cost of processing credit card payments into the Offer. There shall be no additional charges, surcharges, or penalties to the City for payments made by credit card.

6. **LIVING WAGES:**

**The City's Living Wage Program, Rule R161-17.14, is located at:**

<http://www.austintexas.gov/edims/document.cfm?id=277854>

- A. The minimum wage required for all Contractor Employees (and all tiers of Subcontracting) directly assigned to this City Contract is \$14.00 per hour, unless Published Wage Rates are included in this solicitation. In addition, the City may stipulate higher wage rates in certain solicitations in order to assure quality and continuity of service.
- B. The City requires Contractors submitting Offers on this Contract to provide a certification (**see the Living Wages Contractor Certification included in the Solicitation**) with their Offer certifying that all Contractor Employees (and all tiers of Subcontracting) directly assigned to this City Contract will be paid a minimum living wage equal to or greater than \$14.00 per hour. The certification shall include a list of all Contractor Employees (and all tiers of Subcontracting) directly assigned to providing services under the resultant contract including their name and job title. The list shall be updated and provided to the City as necessary throughout the term of the Contract.
- C. The Contractor shall maintain throughout the term of the resultant contract basic employment and wage information for each employee as required by the Fair Labor Standards Act (FLSA).
- D. The Contractor shall provide to the Department's assigned Contract Manager with the first invoice, individual Employee Certifications for all Contractor Employees (and all tiers of Subcontracting) directly assigned to the contract. The City reserves the right to request individual Employee Certifications at any time during the contract term. Employee Certifications shall be signed by each Contractor Employee (and all tiers of Subcontracting) directly assigned to the contract. The Employee Certification form is available on-line at [https://www.austintexas.gov/financeonline/vendor\\_connection/index.cfm](https://www.austintexas.gov/financeonline/vendor_connection/index.cfm).
- E. Contractor shall submit employee certifications for Contractor Employees (and all tiers of Subcontracting) annually on the anniversary date of contract award with the respective invoice to

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verify that employees are paid the Living Wage throughout the term of the contract. The Employee Certification Forms shall be submitted for Contractor Employees (and all tiers of Subcontracting) added to the contract and/or to report any employee changes as they occur.

- F. The Department's assigned Contract Manager will periodically review the employee data submitted by the Contractor to verify compliance with this Living Wage provision. The City retains the right to review employee records required in paragraph C above to verify compliance with this provision.

**7. NON-COLLUSION, NON-CONFLICT OF INTEREST, AND ANTI-LOBBYING:**

- A. On November 10, 2011, the Austin City Council adopted Ordinance No. 20111110-052 amending Chapter 2.7, Article 6 of the City Code relating to Anti-Lobbying and Procurement. The policy defined in this Code applies to Solicitations for goods and/or services requiring City Council approval under City Charter Article VII, Section 15 (Purchase Procedures). During the No-Contact Period, Offerors or potential Offerors are prohibited from making a representation to anyone other than the Authorized Contact Person in the Solicitation as the contact for questions and comments regarding the Solicitation.
- B. If during the No-Contact Period an Offeror makes a representation to anyone other than the Authorized Contact Person for the Solicitation, the Offeror's Offer is disqualified from further consideration except as permitted in the Ordinance.
- C. If an Offeror has been disqualified under this article more than two times in a sixty (60) month period, the Purchasing Officer shall debar the Offeror from doing business with the City for a period not to exceed three (3) years, provided the Offeror is given written notice and a hearing in advance of the debarment.
- D. The City requires Offerors submitting Offers on this Solicitation to certify that the Offeror has not in any way directly or indirectly made representations to anyone other than the Authorized Contact Person during the No-Contact Period as defined in the Ordinance. The text of the City Ordinance is posted on the Internet at: <http://www.ci.austin.tx.us/edims/document.cfm?id=161145>

**8. WORKFORCE SECURITY CLEARANCE AND IDENTIFICATION (ID):**

- A. Access to the Austin Resource Recovery Department building by the Contractor, all subcontractors and their employees will be strictly controlled at all times by the City. Security badges will be issued by the Department for this purpose. The Contractor shall submit a complete list of all persons requiring access to the Austin Resource Recovery building at least thirty (30) days in advance of their need for access. The City reserves the right to deny a security badge to any Contractor personnel for reasonable cause. The City will notify the Contractor of any such denial no more than twenty (20) days after receipt of the Contractor's submittal.
- B. Where denial of access by a particular person may cause the Contractor to be unable to perform any portion of the work of the contract, the Contractor shall so notify the City's Contract Manager, in writing, within ten (10) days of the receipt of notification of denial.
- C. Contractor personnel will be required to check in at the security desk when entering or leaving the Austin Resource Recovery building and security badges must be on display at all times when in the building. Failure to do so may be cause for removal of Contractor Personnel from the worksite, without regard to Contractor's schedule. Security badges may not be removed from the premises.
- D. The Contractor shall provide the City's Contract Manager with a list of personnel scheduled to enter the building, seven days in advance. The list shall identify the persons by name, date of birth, driver's license number, the times that they will be inside the building and the areas where they will be

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working. Only persons previously approved by the City for the issuance of security badges will be admitted to the building.

- E. The Contractor shall comply with all other security requirements imposed by the City and shall ensure that all employees and subcontractors are kept fully informed as to these requirements.

9. **ECONOMIC PRICE ADJUSTMENT:**

- A. **Price Adjustments:** Prices shown in this Contract shall remain firm for the first 12 months of the Contract. After that, in recognition of the potential for fluctuation of the Contractor's cost, a price adjustment (increase or decrease) may be requested by either the City or the Contractor on the anniversary date of the Contract or as may otherwise be specified herein. The percentage change between the contract price and the requested price shall not exceed the percentage change between the specified index in effect on the date the solicitation closed and the most recent, non-preliminary data at the time the price adjustment is requested. The requested price adjustment shall not exceed twenty five percent (25%) for any single line item and in no event shall the total amount of the contract be automatically adjusted as a result of the change in one or more line items made pursuant to this provision. Prices for products or services unaffected by verifiable cost trends shall not be subject to adjustment.
- B. **Effective Date:** Approved price adjustments will go into effect on the first day of the upcoming renewal period or anniversary date of contract award and remain in effect until contract expiration unless changed by subsequent amendment.
- C. **Adjustments:** A request for price adjustment must be made in writing and submitted to the other Party prior to the yearly anniversary date of the Contract; adjustments may only be considered at that time unless otherwise specified herein. Requested adjustments must be solely for the purpose of accommodating changes in the Contractor's direct costs. Contractor shall provide an updated price listing once agreed to adjustment(s) have been approved by the parties.
- D. **Indexes:** In most cases an index from the Bureau of Labor Standards (BLS) will be utilized; however, if there is more appropriate, industry recognized standard then that index may be selected.
- i. The following definitions apply:
- (1) **Base Period:** Month and year of the original contracted price (the solicitation close date).
  - (2) **Base Price:** Initial price quoted, proposed and/or contracted per unit of measure.
  - (3) **Adjusted Price:** Base Price after it has been adjusted in accordance with the applicable index change and instructions provided.
  - (4) **Change Factor:** The multiplier utilized to adjust the Base Price to the Adjusted Price.
  - (5) **Weight %:** The percent of the Base Price subject to adjustment based on an index change.
- ii. **Adjustment-Request Review:** Each adjustment-request received will be reviewed and compared to changes in the index(es) identified below. Where applicable:
- (1) Utilize final Compilation data instead of Preliminary data
  - (2) If the referenced index is no longer available shift up to the next higher category index.
- iii. **Index Identification:** Complete table as they may apply.

Weight % or \$ of Base Price: 100%	
Database Name: Bureau of Labor Statistics	
Series ID: PCU81131-81131-	
<input checked="" type="checkbox"/> Not Seasonally Adjusted	<input type="checkbox"/> Seasonally Adjusted
Description of Series ID: Commercial machinery repair and maintenance	
This Index shall apply to the following items of the Bid Sheet / Cost Proposal: All	

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- E. **Calculation:** Price adjustment will be calculated as follows:

**Single Index:** Adjust the Base Price by the same factor calculated for the index change.

Index at time of calculation
Divided by index on solicitation close date
Equals Change Factor
Multiplied by the Base Rate
Equals the Adjusted Price

- F. If the requested adjustment is not supported by the referenced index, the City, at its sole discretion, may consider approving an adjustment on fully documented market increases.

10. **INTERLOCAL PURCHASING AGREEMENTS:**

- A. The City has entered into Interlocal Purchasing Agreements with other governmental entities, pursuant to the Interlocal Cooperation Act, Chapter 791 of the Texas Government Code. The Contractor agrees to offer the same prices and terms and conditions to other eligible governmental agencies that have an interlocal agreement with the City.
- B. The City does not accept any responsibility or liability for the purchases by other governmental agencies through an interlocal cooperative agreement.

11. **CONTRACT MANAGER:** The following person is designated as Contract Manager, and will act as the contact point between the City and the Contractor during the term of the Contract:

Conley Leloux – Assistant Division Manager

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Phone: 512-974-4315

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Email: conley.leloux@austintexas.gov

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\*Note: The above listed Contract Manager is not the authorized Contact Person for purposes of the **NON-COLLUSION, NON-CONFLICT OF INTEREST, AND ANTI-LOBBYING Provision** of this Section; and therefore, contact with the Contract Manager is prohibited during the no contact period.



**CITY OF AUSTIN  
SCOPE OF WORK  
LANDFILL GAS COLLECTION SERVICES  
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**1.0 PURPOSE**

The City of Austin ("City"), seeks Contractors qualified to provide greenhouse gas monitoring and services, all required reporting for leachate, methane gas collections, control system operations, regulatory guidance and expertise, maintenance, improvement, additional infrastructure, and repair services at the closed Austin Resource Recovery ("ARR") landfill located at 10108 FM 812, Austin, Texas 78719 ("FM 812 Landfill"). This contract will also provide non-routine and emergency services for all associated components as needed and determined by the City.

All eligible proposals submitted in response to this Request for Proposal ("RFP") that address the objectives of the solicitation will be considered by ARR. However, ARR reserves the right to reject any or all proposals, in whole or in part, to negotiate changes in the services and assigned responsibilities described herein, and waive any technicalities as deemed to be in ARR's best interest.

The Contract will be utilized by ARR. The City reserves the right to allow other City Departments to utilize the Contract.

**2.0 BACKGROUND**

The FM 812 Landfill was operated as a Type I landfill until the opening of the Austin Bergstrom International Airport in May 1999. The airport is approximately one mile northwest of the landfill. Type I landfill operations ceased in 1999 because birds attracted to the putrescible waste presented a potential hazard to air traffic at the airport. Thereafter, the FM 812 Landfill operated as a Type IV landfill and accepted only non-putrescible wastes, such as brush and construction debris, until September 2009. The FM 812 Landfill is currently pending regulatory closure contingent on repair.

ARR oversees the closed FM 812 Landfill under Texas Commission on Environmental Quality ("TCEQ") Permit No.360-A. The facility covers approximately 284 acres at the northwest intersection of FM 812 and FM 973. The FM 812 Landfill has an operating methane gas well field to recover methane generated from the decomposing materials under the clay and liners. The landfill also has a leachate collection system to prevent leachate from entering Onion Creek along the north boundary of the landfill. This landfill does not require a Title V permit and surface emissions are not included in this solicitation.

Currently, there are a total of 82 monitoring sites, as well as below-grade, high-density, polyethylene ("HDPE") header piping, one blower, one enclosed candlestick-type flare, associated filters, accessories, and controls. The 82 monitoring sites consist of:

- A. 60 methane recovery wells that go directly to the methane blower flared off through a modified candlestick flare;
- B. 11 curtain wells operated by a separate mini-blower connected to a charcoal canister filter (these wells are not connected to the methane flare);
- C. 3 leachate riser wellheads at multiple condensate collection locations; and
- D. 8 Passive Vents that release landfill gas. The City may request monitoring of the passive vents which allows the City to monitor the methane conditions under the liner.

**NOTE:** The flare is manufactured by Flare Industries, and the blower is manufactured by Gardner Denver. The total monitoring count may change depending on landfill conditions and regulatory concerns or requirements.

**3.0 SCOPE OF WORK**

The specifications described below are to be considered the minimum standards, requirements and specifications for performance, monitoring, reporting, omission statements, and exceptions.

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Where a necessary item has not been included, it shall be required and reasonably presumed to be known as a requirement by the Contractor. The Contractor shall get approval by the Contract Manager before starting any work.

**3.1 Monthly Inspections and Reports**

The Contractor shall complete monthly inspections, services, monitoring, data collection, operations and maintenance ("O&M") of the Gas Collection and Control System ("GCCS").

- 3.1.1 The Contractor shall conduct quarterly monitoring of designated groundwater monitoring wells/piezometers, waterline vents, and site structures for the presence of methane gases and verify and report any and all continuous gas flow in the structures (where applicable). The Contract Manager shall be notified immediately should any methane be detected in any probes, wells, vents, or structures or should any continuous gas monitors be determined to be inoperable. Notification shall be upon inspection while at the site. Any required re-monitoring that needs a separate service call mobilization may be billed separately as non-routine services.
- 3.1.2 Contractor shall provide monthly service, complete maintenance, and all reporting requirements for the gas collection and control system operations that currently include the 82 monitoring sites specified in Section 2, below-grade HDPE header piping, one blower, one enclosed candlestick-type flare, associated filters, accessories, and controls.
- 3.1.3 The Contractor shall conduct monthly monitoring and adjustments of the well field to ensure proper balancing of the landfill gas extraction wells, gas quality, and flow at the blower/flare station.
- 3.1.4 Landfill gas monitoring data will be collected with a Landtec GEM 5000 or equivalent instrument that can store data electronically for later up/downloading. Monitoring of the landfill gas quality and flow at the blower flare station shall be performed on a monthly basis, and Contractor shall document the following data for each well/site in a monthly report (Please reference Section 8.1.1, Monthly Reports). This monthly data collected may be utilized for the annual report as listed in Section 3.4, Annual Greenhouse Gas Reporting.
  - A. Static pressure;
  - B. Differential pressure;
  - C. Landfill gas flow (if wellhead equipped for measurement);
  - D. Landfill gas composition (LFG) (i.e., methane (CH<sub>4</sub>), carbon dioxide (CO<sub>2</sub>), oxygen (O<sub>2</sub>), balance gases);
  - E. Landfill gas temperature;
  - F. Wellhead condition/vacuum;
  - G. Measurement of liquid levels in wells (as needed to troubleshoot gas composition and flow issues);
  - H. Depth-to-liquid level (as needed to troubleshoot LFG composition and flow issues);
  - I. Monitoring date and time;
  - J. Weather conditions;
  - K. Well/piezometer results;
  - L. Structure monitoring results, (in the future with possible construction);
  - M. Probe, well, vent, and continuous gas monitor deficiencies (if any); and
  - N. Any other items known by the Contractor that require reporting according to any local, state, and federal policies and regulations.

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- 3.1.5 For the blower flare station and condensate management system, the operations data below shall be documented by the Contractor. For the blower flare station only, items A through D shall be documented before and after adjustments to the well field. The O&M for the flare blower shall be included during this process.
- A. Blower inlet/outlet pressures and temperatures;
  - B. Landfill gas flow (measured using pitot tube);
  - C. Landfill gas composition;
  - D. Flare temperature;
  - E. Flame arrestor inlet/outlet pressures;
  - F. Blower bearing temperatures and amps;
  - G. Condensate levels in sumps;
  - H. Leachate/condensate levels in storage tanks.
  - I. Flare Blower O&M will include monthly greasing and a grease change out every 6 months (requires AEON CF grease);
  - J. The air compressor pumps have two grease inserts on the motors and they need to be greased per manufacturer's (Speed Aire) requirement;
  - K. The two air compressors' oil shall be changed per the manufacturer's requirement (Baldor-Reliance); and
  - L. The system belts need to be checked and adjusted as required per the manufacturer's requirements.
- 3.1.6 Any leaks identified during the wellhead inspections shall be repaired by the Contractor at the time of discovery. Leaks that cannot be immediately repaired (those requiring replacement parts) shall be temporarily mitigated in the field to the best extent possible. Permanent repairs shall be performed as non-routine scheduled services in accordance with the provisions specified herein.
- 3.1.7 Landfill cover integrity and surface water drainage conditions shall be observed by the Contractor during landfill gas extraction well monitoring. Condensate sumps shall also be observed as to verify their integrity and pump operations, and depth-to-leachate measurements will be taken and documented at each sump. Issues related to these items shall be brought to the attention of the Contract Manager immediately in person, by phone, or by email and noted in the monthly report. The sumps are pneumatic pumps.
- 3.1.8 In the event the FM 812 Landfill liner fails (breach) to contain methane which results in migration to a gas probe or other system component, the Contractor shall have the engineering ability and knowledge to formulate a remedy (pertaining to clay or geosynthetic liner) and work directly with the Contract Manager in requesting the approvals and permits from TCEQ. The City may require the Contractor to attend meetings with TCEQ.
- 3.1.9 The Contractor shall monitor the leachate collection and removal system liner levels from the three Subtitle D units on a monthly basis to measure the depth in the riser pipe to ensure the leachate levels are 30 cm (12 inches) or less. Where levels are over the permit limit, the Contractor shall immediately report to the field personnel for pumping of the excess leachate.
- 3.1.10 The Contractor shall provide monthly reporting summarizing the repairs, maintenance, and any other required data collections specified in this section and outlined in Section 8.1.1.

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**3.2 Quarterly Inspections**

The Contractor shall complete quarterly operations and maintenance, inspections, and services to the GCCS collection pump and sump O&M system.

3.2.1 The Contractor shall perform quarterly monitoring of perimeter LFG probes in accordance with the requirements of Texas Administrative Code ("TAC"), Title 30, Section 330.371, and any other applicable statutes. The Contractor shall monitor designated groundwater monitoring wells/piezometers, waterline vents, and site structures for the presence of methane gases and verify the operations of any continuous gas monitors in structure and proper working order (where applicable). At a minimum, the following shall be performed and documented for each service:

- A. Ensure concentration of methane gases generated do not exceed volumes as defined in TAC, Section 330.371(a)(1) and (2) or applicable current regulatory requirements;
- B. Monitoring date and time;
- C. Weather and soil conditions;
- D. Hydro-geologic and hydraulic conditions surrounding the sites/facility;
- E. Probe condition and pressure;
- F. Depth to water, feet and inches, (in probes and wells/piezometers only), and
- G. All other requirements defined in the TAC, Section 330.371 and any other regulatory requirements.

**NOTE:** The GP-wells and ground water wells have single level piping. There is no purging required on the GP-wells or ground water wells. The methane monitor instrument shall be purged after each reading. Please reference Attachment A, a Site map of the FM 812 Landfill that includes monitoring well locations and gas monitoring probe locations.

3.2.2 Should methane be detected or discovered in any probes, wells, vents, or structures; or should any continuous gas monitors be determined to be inoperable, the Contract Manager shall be notified as soon as detection is discovered via phone or in person. In the event that re-monitoring requires a separate mobilization, such services shall be billed separately as non-routine services in accordance with the contract. The Contractor shall determine where the methane containment failure has occurred and provide input on how to fix the issue to the Contract Manager within fourteen days of detection or discovery of high methane levels. The Contract Manager will approve any plan to fix the methane containment before the Contractor proceeds. The City may request the Contractor to monitor the methane levels weekly (or as determined by the Contract Manager) until the levels have returned to a standard level.

3.2.3 The Contractor shall provide quarterly reporting summarizing the repairs, maintenance, and any other required data collections specified in this section and outlined in Section 8.1.2.

**3.3 Semi-Annual Inspections**

The Contractor shall complete semi-annual inspections, services and monitoring of leachate with gas control systems. The Contractor shall not remove the pump unless it has failed, or unless directed to do so by the City.

3.3.1 The gas collection and control system includes six pumps in the sump/storage tanks for condensation by-product of the methane and six submersible pumps in the dual extraction wells. There are a total of 35 pumps/sumps for the leachate systems and the gas control and collection system. The pumps can be pulled by hand or crane

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depending on the Contractor's preference. The Contractor shall perform a semi-annual check to the following operational items for pumps and sumps associated with the leachate systems and the gas control and collection system:

- A. Verification that high level alarms on leachate tanks are working properly;
- B. Removal and cleaning of pumps and inspection of sensors/controls; and
- C. Maintenance as needed on each pump and sump (please include cost mark up or discounts for this on Line 15 in Section 0600, Proposal Sheet.)

**3.4 Annual Greenhouse Gas Reporting**

The Contractor shall use the information gathered from the monthly report (as described in Section 3.1.4 and Section 8.1.1) to tabulate the required annual greenhouse gas report for the FM812 Landfill to the Environmental Protection Agency ("EPA").

- 3.4.1 Along with the requirements of Section 3.1.4, the Contractor shall ensure operations of the gas control and collection system are in conformance with all applicable state and federal regulations.
- 3.4.2 The Contractor is required to have knowledge regarding proper levels/limits in compliance with all regulatory requirements and shall monitor and maintain all sites to conform to all current regulations.

**3.5 Non-Routine and Emergency Services**

The Contractor shall provide non-routine and/or emergency services for these systems as determined by the City. The City understands that the specific services below may vary depending on valve type, size, and depth of pipes, etc. The Contractor in their bid may make assumptions about these items when submitting their pricing. The City anticipates the following services may be needed during the contract period:

- A. Two (2) re-monitoring and maintenance services of the landfill gas control and collection system extraction wells with exceedances (any findings not matching regulatory criteria) for pressure, temperature and/or oxygen concentration levels (about 25 percent of the wells) during which monitoring of the blower/flare station may also need to be performed;
- B. Four (4) monitoring service calls for the blower/flare station at times other than the monthly well field monitoring or a re-monitoring service call;
- C. One (1) repair of a broken valve (wellhead, isolation, etc.);
- D. Twelve (12) replacements of torn flex hoses on LFG extraction wells;
- E. Two (2) repairs to main header lines (10" HDPE or less);
- F. Trouble shoot any methane migration issues in the collection system, including migration from cell containment;
- G. Gas flow meter calibrations, as needed;
- H. Other mechanical and electrical repairs as necessary, as approved by the City; and/or
- I. Site level tubes on leachate Tank A and B need to be replaced as needed due to clouding of the tubes.

**3.6 Maintenance Meetings**

As requested by the City, the Contractor shall participate in quarterly meetings to discuss matters related to the operations and maintenance of the gas control and collection systems. The Contractor shall include four such meetings per year in its proposal. To the extent possible, the meetings will be held in conjunction with routine O&M service dates, and the project manager and technician will attend meetings. The meetings will be at the landfill site with an approximate duration of two hours or less.

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**4.0 CONTRACTOR'S RESPONSIBILITIES**

**4.1 Project Manager**

The Contractor shall provide a Project Manager who will oversee the contract. The Project Manager shall be a certified Texas Board Professional Engineer ("P.E."). The Contractor shall also provide contact information for the Project Manager and an alternate contact person who will be available by telephone between 8:00 AM and 5:00 PM Central Time, Monday through Friday. The Contractor shall also provide ARR with emergency contact information for after-hours and weekends. The City reserves the right to request a change in Project Manager.

**4.2 Equipment and Materials**

The Contractor shall be solely responsible for obtaining/providing all materials, equipment, supplies, labor, and other services required by the contract as may be necessary to fulfill the requirements of the contract.

**4.3 Potential Landfill Gas to Energy System**

In 2012, Austin Resource Recovery, along with help from a recognized consulting landfill gas company, completed a Landfill Gas to Energy (LFGTE) feasibility study to determine if current landfill conditions could support a gas to energy system. The study included two phases that were designed to increase the methane content and volume. Work was completed and a period of data collection was completed. The data showed that there was neither the quality nor quantity of landfill gas to fiscally warrant a LFGTE program based on current technology. This is primarily due to the old age of the landfill and the long time span that the landfill last received putrescible waste. Should technology change that warrants reconsideration, this contract may also include engineering guidance, methane balancing, and integration of a potential Landfill Gas to Energy ("LFGTE") system by request of the City.

**4.4 Spills and Leaks**

4.4.1 The Contractor shall possess all authorized Occupational Safety and Health Administration ("OSHA"), Texas Department of Transportation ("TxDOT"), and TCEQ hazardous waste operations and emergency response spill kits and shall be responsible for any and all spills and/or leaks.

4.4.2 The Contractor, its employees, subcontractors, or consultants shall solely be responsible and liable for all the management, cleanup, resulting damages, expenses, and all drips, leaks and/or spills from any source, solid or liquid, and/or loss of debris, even minimal amounts, that occur from the transportation, pickup, disposal, or processing of materials associated with this contract. The Contractor shall inform the Contract Manager of all such spills immediately after the occurrence of the spill event. Should spillage occur in, on, from, and/or around the service area and **for any reason**, the Contractor is solely liable for spillage and shall clean, pump out, sweep up and properly dispose of the material/litter. At a minimum, cleaning and sweeping shall include, the gathering and removal of material from the container and/or area where spillage occurred and the surrounding premises and adjoining areas using either manual or mechanized brooms, and/or sweeping machines, and proper solvents for cleanup. Cleanup shall conform to all federal, state, and local regulations and ordinances. All damage, accidents, and/or injuries that occur as a result of any leaks and/or spills shall be the sole liability and responsibility of the Contractor.

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LANDFILL GAS COLLECTION SERVICES  
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**6.0 QUANTITIES AND OMISSIONS**

**6.1 Quantities**

Quantities provided in this RFP are estimates and for evaluation purposes only. Actual quantities may be more or less. No quantities are guaranteed. The City reserves the right to add similar services to this contract. The City does not guarantee the services or materials listed above will be needed or required from the Contractor and/or obligate the City in any way. The City also reserves the right to add or remove wells at this location.

**6.2 Omissions**

It is the intention of this RFP to acquire the services described herein. All items and/or services omitted from this document which are clearly necessary to meet the objectives of the services described will be considered requirements, although not directly specified or called for herein. Pricing and discounts (if applicable) for any necessary but omitted item or service shall be listed in the Contractor's proposal sheet.

**6.3 Out of Scope Services**

Services not included hereunder or in a service schedule will be provided at prices and on terms mutually agreed to by both parties.

**7.0 MINIMUM QUALIFICATIONS**

**7.1 Minimum Qualifications**

- A. The Contractor shall submit information demonstrating compliance with the minimum qualifications specified below. Proposals that do not meet the minimum requirements will be deemed non-responsive and will not be considered. The Contractor must have:
  - i. Minimum five years' experience in landfill methane gas systems, landfill leachate systems, and their operations;
  - ii. Experience with the EPA, TCEQ, and landfill requirements for methane and leachate;
  - iii. Be certified P.E.s from the Texas Board of Professional Engineers and submit proof of their certification with their proposal; and
  - iv. Own or be able to rent/lease all equipment required to perform the services described herein.
- B. The Contractor shall provide a list of at least three names, addresses, and telephone numbers with individuals at entities or commercial references for similar work as outlined in these specifications with their proposal. References shall validate satisfactory service and number of years of experience.

**8.0 REPORTING AND LICENSES**

**8.1 Reports**

8.1.1 **Monthly Report:** By the 10th day of the month following the completion of each monthly well field monitoring (including any required re-monitoring), the Contractor shall submit a report to the City summarizing the operations and maintenance activities (as described in Section 3.1.4) including the following information at a minimum:

- A. Monitoring data collected at each individual extraction well;
- B. Status of each well's compliance with state and federal requirements for pressure, temperature and oxygen concentration;
- C. Monitoring data collected at the blower/flare station;

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- D. Condensate sump knockout levels and operational status;
- E. Description of any non-routine services provided during the month;
- F. Recommendations of additional maintenance or repairs needed; and
- G. Recommendations of enhancements to improve gas control and collection system operations and performance.

8.1.2 **Quarterly Report:** If no exceedances of regulatory limits are detected during routine monitoring, the Contractor shall prepare and submit a report to the Contract Manager on or before the 10th day of the month after the LFG probe monitoring was performed. In the event there is an exceedance detected with the sumps, flare, or leachate system, the report shall be submitted within 48 hours of the monitoring service call. Both reports shall include, but not be limited to, the following information:

- A. LFG probe monitoring results;
- B. Well/piezometer monitoring results;
- C. Utility LFG vent monitoring results;
- D. Structure monitoring results; and
- E. Probe, well, vent, and continuous gas monitor deficiencies (if any).

8.1.3 **Annual and Other Reports:** The Contractor shall be required to submit an annual report as described in Section 3.4, Annual Greenhouse Gas Reporting, and may be required to submit any other reports to state and federal agencies as requested by the City or required by state and/or federal law.

**8.2 Certifications, Licenses and Permits**

8.2.1 The Contractor shall have, maintain, and make available upon request throughout the term of any resulting contract, all licenses and permits required by federal, state, and local agencies to provide all services described herein.

8.2.2 The Contractor and all subcontractors shall comply with all laws applicable to the services under this contract, including all federal, state, and local laws, and Travis County and City ordinances. The Contractor and all subcontractors shall have and maintain current identification numbers, licenses, permits, and other governmental approvals or authorizations required by all applicable environmental or safety laws. ARR may, at any time, terminate this contract with cause based on the Contractor's or any subcontractor's non-compliance with applicable environmental or safety laws. The Contractor shall be solely responsible for its compliance and its subcontractors' compliance.



**CITY OF AUSTIN  
PURCHASING OFFICE  
PROPOSAL PREPARATION INSTRUCTIONS AND EVALUATION FACTORS  
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**1.0. PROPOSAL FORMAT**

Prefacing the proposal, the Proposer shall provide an Executive Summary of three (3) pages or less, which gives in brief, concise terms, a summation of the proposal. The proposal itself shall be organized in the following format and informational sequence:

**A. Tab 1 – Executive Summary:** Provide an Executive Summary of three pages or less which gives in brief terms a summation of the Proposal.

**B. Tab 2 – City of Austin Purchasing Documents:**

Complete and submit the following documents:

- i. Offer Sheet
- ii. Section 0510 – Exceptions Checklist
- iii. Section 0605 – Local Business Presence Identification
- iv. Section 0700 – Reference Sheet
- v. Section 0800 – Non-Discrimination and Non-Retaliation Certification
- vi. Section 0815 – Living Wages Contractor Certification
- vii. Section 0835 – Non-Resident Bidder Provisions
- viii. Section 0840 – SDVBE Contractor Certification
- ix. Completed and signed Section 0900 No Goals Utilization Plan (if applicable). **If you will be utilizing subcontractors, you must contact the Small and Minority Business Resources Department (SMBR) at 512-974-7600 to obtain a list of MBE/WBE firms available to perform the service and include the completed 0900 No Goals Utilization Plan with your proposal packet. Include 0900 No Goals Utilization Plan in Tab 2.**
- x. Published Addendums

**C. Tab 3 – Authorized Negotiator:** Include the name, address, and telephone number of the person in your organization authorized to negotiate Contract terms and render binding business decisions on Contract matters.

**D. Tab 4 – Business Organization:** State full name and address of your organization and identify parent company if you are a subsidiary. Specify the branch office or other subordinate element which will perform, or assist in performing, work herein. Indicate whether you operate as a partnership, corporation, or individual. Include the State in which incorporated or licensed to operate.

**E. Tab 5 – Experience:** Provide written documentation verifying that the Contractor has a minimum of five (5) years of experience successfully performing similar services. The Contractor, in order to demonstrate their expertise, abilities, and compliance in the minimum qualifications, may provide a descriptive letter, outline, summary, or synopsis outlining their experience. The Contractor with the most experience that meets the minimum qualifications will be given the maximum points. All others will be awarded points based on a pro-rated basis. Do not include corporate experience unless personnel assigned to this project actively participated. Do not include experience prior to 1998.

**F. Tab 6 – Personnel and Project Management Structure:**

- i. Provide a general explanation and chart which specifies project leadership and reporting responsibilities; and interface the team with City project management and team personnel. If use of subcontractors is proposed, identify their placement in the primary management structure and provide internal management description for each subcontractor.

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- ii. Include names and qualifications of all professional personnel who will be assigned to this project. State the primary work assigned to each person and the percentage of time each person will devote to this work. Identify key persons by name and title. Provide all resumes.

**G. Tab 7 – Project Approach:** Describe your technical plan for accomplishing required work. Include such time-related displays, graphs, and charts as necessary to show tasks, sub-tasks, milestones, and decision points related to the Scope of Work and your plan for accomplishment. Specifically indicate:

- i. A description of your work program by tasks. Detail the steps you will take from start to finish to complete the services described herein.
- ii. The technical factors that will be considered in section above, and the depth to which each will be treated.
- iii. The degree of definition provided in each technical element of your plan.
- iv. Each Contractor can be allotted the maximum number of points for this section.
- v. A statement of your compliance with all applicable rules and regulations of federal, state, and local governing entities. The Proposer must state his compliance with terms of this Request for Proposal (RFP).

**H. Tab 8 – Cost Proposal:** The Section 0600A is required from each Proposer. Provide all details as required in the SOW and any additional information you deem necessary to evaluate your proposal cost.

**I. Tab 9 – Proposal Acceptance Period:** All proposals are valid for a period of one hundred and eighty (180) calendar days subsequent to the RFP closing date unless a longer acceptance period is offered in the proposal.

2.0 **SERVICE-DISABLED VETERAN BUSINESS ENTERPRISE (“SDVBE”):** The City seeks opportunities for SDVBE to participate on City contracts. Any Contractor that meets this qualification will receive a 3% preference toward its formal proposal. A Contractor is considered an SDVBE if the Contractor is certified by the State of Texas, Historically Underutilized Business (HUB) Program with the State Comptroller’s Office. The preference only applies to Prime Contractors responding to RFPs, not any subcontractors utilized. Complete and return the Section 0840 – SDVBE Contractor Certification Form when responding to the RFP solicitation.

3.0 **PROPRIETARY INFORMATION:** All material submitted to the City becomes public property and is subject to the Texas Open Records Act upon receipt. If a Proposer does not desire proprietary information in the proposal to be disclosed, each page must be identified and marked proprietary at time of submittal. The City will, to the extent allowed by law, endeavor to protect such information from disclosure. The final decision as to what information must be disclosed, however, lies with the Texas Attorney General. Failure to identify proprietary information will result in all unmarked sections being deemed non-proprietary and available upon public request.

4.0 **DEBRIEFINGS:** Any Offeror to this solicitation may request a debriefing up until 30 calendar days after the contract has been fully executed. Accepting debriefing requests after 30 days of contract execution will be at the sole discretion of the City. Debriefings will be scheduled at the availability of the authorized point of contact and will focus specifically on the offer submitted by the Offeror.

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5.0 **EXCEPTIONS:** List any exceptions that your company is making to the solicitation in Section 0510. Be advised that exceptions to any portion of the Solicitation may jeopardize acceptance of the Proposal.

6.0 **PROPOSAL PREPARATION COSTS:** All costs directly or indirectly related to preparation of a response to the RFP or any oral presentation required to supplement and/or clarify a proposal which may be required by the City shall be the sole responsibility of the Contractor.

7.0 **EVALUATION FACTORS AND AWARD**

**A. Competitive Selection:** This procurement will comply with applicable City Policy. The successful Proposer will be selected by the City on a rational basis. Evaluation factors outlined in Paragraph B below shall be applied to all eligible, responsive Proposers in comparing proposals and selecting the Best Offeror. Award of a Contract may be made without discussion with Proposers after proposals are received. Proposals should, therefore, be submitted on the most favorable terms.

**B. Evaluation Factors:**

i. 100 Points

Evaluation Factor No.	Title	Maximum Point Value
1	Business Experience	25
2	Personnel Qualifications and Project Management	22
3	Total Evaluated Cost	20
4	Project Approach	20
5	Local Business Presence	10
6	Service Disabled Veteran Business Enterprise	3
<b>Total:</b>		100

ii. **Local Business Preference (Maximum 10 Points)**

Team's Local Business Presence	Points Awarded
Local business presence of 90% to 100%	10
Local business presence of 75% to 89%	8
Local business presence of 50% to 74%	6
Local business presence of 25% to 49%	4
Local presence of between 1% and 24%	2
No local presence	0

iii. Presentations, Demonstrations Optional. The City will score proposals on the basis of the criteria listed above. The City may select a "short list" of Proposers based on those scores. "Short-listed" Proposers may be invited for presentations, or demonstrations with the City. The City reserves the right to re-score "short-listed" proposals as a result, and to make award recommendations on that basis.

**Section 0510: Exceptions Checklist**

**Solicitation Number:** RFP 1500 SLW3000 Landfill Gas Collection Services

The City will presume that the Offeror is in agreement with all sections of the solicitation unless the Offeror takes specific exception as indicated below. Complete the exception information indicating each exception taken, provide alternative language, and justify the alternative language. The City, at its sole discretion, may negotiate exceptions that do not result in material deviations from the sections contained in the solicitation documents. Material deviations as determined by the City may result in the City deeming the Offer non-responsive. The Offeror that is awarded the contract shall be required to sign the contract with the provisions accepted or negotiated.

Place this attachment in Tab 2 of your offer. Copies of this form may be utilized if additional pages are needed.

**Indicate:**

- ☐ **0300 Standard Purchase Terms & Conditions**
- ☐ **0400 Supplemental Purchase Provisions**
- ☐ **0500 Scope of Work**

**Page Number**

**Section Number**

**Section Description**

**Alternative Language:**

**Justification:**

**No exceptions are taken by Offeror to any sections of the solicitation.**

**Section 0605: Local Business Presence Identification**

A firm (Offeror or Subcontractor) is considered to have a Local Business Presence if the firm is headquartered in the Austin Corporate City Limits, or has a branch office located in the Austin Corporate City Limits in operation for the last five (5) years, currently employs residents of the City of Austin, Texas, and will use employees that reside in the City of Austin, Texas, to support this Contract. The City defines headquarters as the administrative center where most of the important functions and full responsibility for managing and coordinating the business activities of the firm are located. The City defines branch office as a smaller, remotely located office that is separate from a firm's headquarters that offers the services requested and required under this solicitation.

**OFFEROR MUST SUBMIT THE FOLLOWING INFORMATION FOR EACH LOCAL BUSINESS (INCLUDING THE OFFEROR, IF APPLICABLE) TO BE CONSIDERED FOR LOCAL PRESENCE.**

*NOTE: ALL FIRMS MUST BE IDENTIFIED ON THE MBE/WBE COMPLIANCE PLAN OR NO GOALS UTILIZATION PLAN (REFERENCE SECTION 0900).*

**\*USE ADDITIONAL PAGES AS NECESSARY\***

**OFFEROR:**

Name of Local Firm	Stearns, Conrad and Schmidt, Consulting Engineers, Inc., dba SCS Field Services	
Physical Address	8107 Springdale Rd, Suite 108, Austin, TX 78724	
Is your headquarters located in the Corporate City Limits? (circle one)	Yes	No
or		
Has your branch office been located in the Corporate City Limits for the last 5 years?	Yes	No
Will your business be providing additional economic development opportunities created by the contract award? (e.g., hiring, or employing residents of the City of Austin or increasing tax revenue?)	Yes	No

**SUBCONTRACTOR(S):**

Name of Local Firm	None	
Physical Address		
Is your headquarters located in the Corporate City Limits? (circle one)	Yes	No
or		
Has your branch office been located in the Corporate City Limits for the last 5 years	Yes	No

Will your business be providing additional economic development opportunities created by the contract award? (e.g., hiring, or employing residents of the City of Austin or increasing tax revenue?)	Yes	No

**SUBCONTRACTOR(S):**

Name of Local Firm	None	
Physical Address		
Is your headquarters located in the Corporate City Limits? (circle one)	Yes	No
or		
Has your branch office been located in the Corporate City Limits for the last 5 years	Yes	No
Will your business be providing additional economic development opportunities created by the contract award? (e.g., hiring, or employing residents of the City of Austin or increasing tax revenue?)	Yes	No

**Section 0700: Reference Sheet**Responding Company Name Stearns, Conrad and Schmidt, Consulting Engineers, Inc.

The City at its discretion may check references in order to determine the Offeror's experience and ability to provide the products and/or services described in this Solicitation. The Offeror shall furnish at least 3 complete and verifiable references. References shall consist of customers to whom the offeror has provided the same or similar services within the last 5 years. References shall indicate a record of positive past performance.

1. Company's Name Travis County  
Name and Title of Contact Keith Coburn, Environmental Project Manager  
Project Name Travis County, Hwy 290 Landfill LMS Monitoring  
Present Address PO Box 1748  
City, State, Zip Code Austin, TX 78767  
Telephone Number ( 512 ) 854-5866 Fax Number ( 512 ) 854-4648  
Email Address keith.coburn@traviscountytexas.gov
  
2. Company's Name City of Corpus Christi  
Name and Title of Contact Tony Benavides, Disposal & Environmental Compliance Superintendent  
Project Name Cefe Landfill and JC Elliott Landfill GCCS Monitoring  
Present Address PO Box 9277  
City, State, Zip Code Corpus Christi, TX 78469  
Telephone Number ( 512 ) 826-1633 Fax Number ( 361 ) 880-3501  
Email Address tonyb@cctexas.com
  
3. Company's Name City of Brownsville  
Name and Title of Contact Martino Trevino, Superintendent  
Project Name Brownsville Landfill GCCS Monitoring  
Present Address 6035 Jaime J. Zapata Ave  
City, State, Zip Code Brownsville, TX 78521  
Telephone Number ( 956 ) 548-6000 Fax Number ( 956 ) 548-6191  
Email Address mtrevino@cob.us

**City of Austin, Texas**  
**Section 0800**  
**NON-DISCRIMINATION AND NON-RETALIATION CERTIFICATION**

**City of Austin, Texas**  
**Equal Employment/Fair Housing Office**

To: City of Austin, Texas,

I hereby certify that our firm complies with the Code of the City of Austin, Section 5-4-2 as reiterated below, and agrees:

- (1) Not to engage in any discriminatory employment practice defined in this chapter.
- (2) To take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without discrimination being practiced against them as defined in this chapter, including affirmative action relative to employment, promotion, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rate of pay or other forms of compensation, and selection for training or any other terms, conditions or privileges of employment.
- (3) To post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Equal Employment/Fair Housing Office setting forth the provisions of this chapter.
- (4) To state in all solicitations or advertisements for employees placed by or on behalf of the Contractor, that all qualified applicants will receive consideration for employment without regard to race, creed, color, religion, national origin, sexual orientation, gender identity, disability, sex or age.
- (5) To obtain a written statement from any labor union or labor organization furnishing labor or service to Contractors in which said union or organization has agreed not to engage in any discriminatory employment practices as defined in this chapter and to take affirmative action to implement policies and provisions of this chapter.
- (6) To cooperate fully with City and the Equal Employment/Fair Housing Office in connection with any investigation or conciliation effort of the Equal Employment/Fair Housing Office to ensure that the purpose of the provisions against discriminatory employment practices are being carried out.
- (7) To require of all subcontractors having 15 or more employees who hold any subcontract providing for the expenditure of \$2,000 or more in connection with any contract with the City subject to the terms of this chapter that they do not engage in any discriminatory employment practice as defined in this chapter

For the purposes of this Offer and any resulting Contract, Contractor adopts the provisions of the City's Minimum Standard Non-Discrimination and Non-Retaliation Policy set forth below.

**City of Austin**  
**Minimum Standard Non-Discrimination and Non-Retaliation in Employment Policy**

As an Equal Employment Opportunity (EEO) employer, the Contractor will conduct its personnel activities in accordance with established federal, state and local EEO laws and regulations.

The Contractor will not discriminate against any applicant or employee based on race, creed, color, national origin, sex, age, religion, veteran status, gender identity, disability, or sexual orientation. This policy covers all aspects of employment, including hiring, placement, upgrading, transfer, demotion, recruitment, recruitment advertising, selection for training and apprenticeship, rates of pay or other forms of compensation, and layoff or termination.

The Contractor agrees to prohibit retaliation, discharge or otherwise discrimination against any employee or applicant for employment who has inquired about, discussed or disclosed their compensation.

Further, employees who experience discrimination, sexual harassment, or another form of harassment should immediately report it to their supervisor. If this is not a suitable avenue for addressing their complaint, employees are advised to contact another member of management or their human resources representative. No employee shall be discriminated against, harassed, intimidated, nor suffer any reprisal as a result of reporting a violation of



this policy. Furthermore, any employee, supervisor, or manager who becomes aware of any such discrimination or harassment should immediately report it to executive management or the human resources office to ensure that such conduct does not continue.

Contractor agrees that to the extent of any inconsistency, omission, or conflict with its current non-discrimination and non-retaliation employment policy, the Contractor has expressly adopted the provisions of the City's Minimum Non-Discrimination Policy contained in Section 5-4-2 of the City Code and set forth above, as the Contractor's Non-Discrimination Policy or as an amendment to such Policy and such provisions are intended to not only supplement the Contractor's policy, but will also supersede the Contractor's policy to the extent of any conflict.

UPON CONTRACT AWARD, THE CONTRACTOR SHALL PROVIDE THE CITY A COPY OF THE CONTRACTOR'S NON-DISCRIMINATION AND NON-RETALIATION POLICIES ON COMPANY LETTERHEAD, WHICH CONFORMS IN FORM, SCOPE, AND CONTENT TO THE CITY'S MINIMUM NON-DISCRIMINATION AND NON-RETALIATION POLICIES, AS SET FORTH HEREIN, **OR** THIS NON-DISCRIMINATION AND NON-RETALIATION POLICY, WHICH HAS BEEN ADOPTED BY THE CONTRACTOR FOR ALL PURPOSES WILL BE CONSIDERED THE CONTRACTOR'S NON-DISCRIMINATION AND NON-RETALIATION POLICY WITHOUT THE REQUIREMENT OF A SEPARATE SUBMITTAL.

**Sanctions:**

Our firm understands that non-compliance with Chapter 5-4 and the City's Non-Retaliation Policy may result in sanctions, including termination of the contract and suspension or debarment from participation in future City contracts until deemed compliant with the requirements of Chapter 5-4 and the Non-Retaliation Policy.

**Term:**

The Contractor agrees that this Section 0800 Non-Discrimination and Non-Retaliation Certificate of the Contractor's separate conforming policy, which the Contractor has executed and filed with the City, will remain in force and effect for one year from the date of filing. The Contractor further agrees that, in consideration of the receipt of continued Contract payment, the Contractor's Non-Discrimination and Non-Retaliation Policy will automatically renew from year-to-year for the term of the underlying Contract.

Dated this 5th day of June, 2018

CONTRACTOR

SCS Field Services

Authorized  
Signature



Title

Vice President

**Section 0815: Living Wages Contractor Certification**

Pursuant to the Living Wages provision (reference Section 0400, Supplemental Purchase Provisions) the Contractor is required to pay to all employees of the Prime Contractor and all tiers of subcontractors directly assigned to this City contract a minimum Living Wage equal to or greater than \$14.00 per hour.

- (1) The below listed individuals are all known employees of the Prime Contractor and its subcontractors who are directly assigned to this contract, and all are compensated at wage rates equal to or greater than \$14.00 per hour:

Employee Name	Employer	Prime or Sub	Your Normal Rate	Employee Job Title
Rusty Fusilier	SCS Field Svcs	Prime	\$53.51	Project Manager
Kathlene Ewing	SCS Field Svcs	Prime	\$25.74	Sr. Project Admin
Joe Ortiz	SCS Field Svcs	Prime	\$37.71	Superintendent
William Morrison	SCS Field Svcs	Prime	\$26.25	Superintendent
David Mezzacappa	SCS Field Svcs	Prime	\$67.06	SW/Air Manager
Jason Lewallen	SCS Field Svcs	Prime	\$49.04	Construction Mngr


- (2) All future employees of both the Prime Contractor and all tiers of subcontractors directly assigned to this Contract will be paid a minimum Living Wage equal to or greater than \$14.00 per hour.
- (3) Our firm will not retaliate against any employee of either the Prime Contractor or any tier of subcontractors claiming non-compliance with the Living Wage provision.

A Prime Contractor or subcontractor that violates this Living Wage provision shall pay each of its affected employees the amount of the deficiency for each day the violation continues. Willful or repeated violations of the provision by either the Prime Contractor or any tier of subcontractor, or fraudulent statements made on this certification, may result in termination of this Contract for Cause, subject the violating firm to possible suspension or debarment, or result in legal action.

I hereby certify that all the listed employees of both the Prime Contractor and all tiers of subcontractors who are directly assigned to this contract are paid a minimum Living Wage equal to or greater than \$14.00 per hour.

Contractor's Name: Stearns, Conrad and Schmidt, Consulting Engineers, Inc.

Signature of Officer  
or Authorized  
Representative:



Date: 6/5/2018

Printed Name:

Ronald L. Wilks

Title

Vice President

**Section 0835: Non-Resident Bidder Provisions**

Company Name Stearns, Conrad and Schmidt, Consulting Engineers, Inc.

- A. Bidder must answer the following questions in accordance with Vernon's Texas Statutes and Codes Annotated Government Code 2252.002, as amended:

Is the Bidder that is making and submitting this Bid a "Resident Bidder" or a "non-resident Bidder"?

Answer: Non-Resident Bidder

- (1) Texas Resident Bidder- A Bidder whose principle place of business is in Texas and includes a Contractor whose ultimate parent company or majority owner has its principal place of business in Texas.  
(2) Nonresident Bidder- A Bidder who is not a Texas Resident Bidder.

- B. If the Bidder is a "Nonresident Bidder" does the state, in which the Nonresident Bidder's principal place of business is located, have a law requiring a Nonresident Bidder of that state to bid a certain amount or percentage under the Bid of a Resident Bidder of that state in order for the nonresident Bidder of that state to be awarded a Contract on such bid in said state?

Answer: Yes Which State: California

- C. If the answer to Question B is "yes", then what amount or percentage must a Texas Resident Bidder bid under the bid price of a Resident Bidder of that state in order to be awarded a Contract on such bid in said state?

Answer: California has a reciprocal preference with regard to out-of-state contractors.

# Section 0840, Service-Disabled Veteran Business Enterprise Preference

## Offeror Name

Stearns, Conrad and Schmidt, Consulting Engineers, Inc.

## Additional Solicitation Instructions.

1. ☒ By checking this box, Offeror states they are NOT a certified Service-Disabled Veteran Business Enterprise seeking to claim preference points under the City of Austin's SDVBE Program.
2. Offerors seeking to claim the Service-Disabled Veteran Business Enterprise (SDVBE) preference shall be certified **under one of the two following scenarios**. Offerors shall check one of the following boxes, input the data in the applicable table below and include this completed form in their Proposal.
  - ☐ **HUB/SV**. Offeror is certified as a Service-Disabled Veteran (SV) Historically Underutilized Business (HUB) by the Texas State Comptroller of Public Accounts.

Texas State HUB/SV Certification	
13-Digit Vendor ID (VID)	
HUB/SV Issue Date	
HUB/SV Expiration Date	

- ☐ **HUB/OTHER + Federal SDVOSB**. Offeror is certified by the Texas State Comptroller of Public Accounts as a Historically Underutilized Business in a HUB Eligibility Category other than Service-Disabled Veteran (SV) AND is verified by the US Veterans Administration as a Service-Disabled Veteran-Owned Small Business (SDVOSB). **Texas HUB Eligibility Categories:** HUB/BL (Black), HUB/AS (Asian), HUB/HI (Hispanic), HUB/AI (Native American), or HUB/WO (Women Owned).

Texas State HUB/OTHER Certification	
13-Digit Vendor ID (VID)	
HUB Eligibility Category	
HUB Issue Date	
HUB Expiration Date	

Federal SDVOSB Verification	
9-Digit DUNS	
SDVOSB Issue Date	
SDVOSB Expiration Date	

3. **Offeror Identity**. The Offeror submitting the Proposal shall be the same entity that is certified by the Texas State Comptroller of Public Accounts, AND if applicable as verified by the US Veterans Administration.
4. **Certification Status**. Offeror's certification(s) must be active on or before the Solicitation's due date for Proposals and shall not expire prior to the award and execution of any resulting contract.
5. **Confirmation of Certification(s)**. Upon receipt of this completed form, the City will confirm the Offeror's certification(s): State: <https://mycpa.cpa.state.tx.us/tpasscmbsearch>. Federal: <https://www.vip.vetbiz.gov/> The City will direct any questions concerning an Offeror's State or Federal certification status to the Offeror's contact person as designated on the Offer Form of their Proposal.
6. **Misrepresentation**. If the City determines that the Offeror requesting this preference is not certified by the State or Federal government if applicable, the Offeror will not receive the preference points. If the City determines that this misrepresentation was intentional, the City may also find the Offeror not responsible and may report the Offeror to the Texas State Comptroller of Public Accounts or if applicable to the US Veterans Administration. If the misrepresentation is discovered after contract award, the City reserves the right to void the contract.

**Section 0900: SUBCONTRACTING/SUB-CONSULTING UTILIZATION FORM**



**MINORITY- AND WOMEN-OWNED BUSINESS ENTERPRISE (MBE/WBE)  
PROCUREMENT PROGRAM**

**Subcontracting/Sub-Consulting ("Subcontractor") Utilization Form**

SOLICITATION NUMBER:

SOLICITATION TITLE:

In accordance with the City of Austin's Minority and Women-Owned Business Enterprises (M/WBE) Procurement Program (Program), Chapters 2-9A/B/C/D of the City Code and M/WBE Program Rules, this Solicitation was reviewed by the Small and Minority Business Resources Department (SMBR) to determine if M/WBE Subcontractor/Sub-Consultant ("Subcontractor") Goals could be applied. Due to insufficient subcontracting/subconsultant opportunities and/or insufficient availability of M/WBE certified firms, SMBR has assigned no subcontracting goals for this Solicitation. However, Offerors who choose to use Subcontractors must comply with the City's M/WBE Procurement Program as described below. Additionally, if the Contractor seeks to add Subcontractors after the Contract is awarded, the Program requirements shall apply to any Contract(s) resulting from this Solicitation.

**Instructions:**

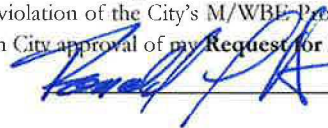
- a.) Offerors who do not intend to use Subcontractors shall check the "NO" box and follow the corresponding instructions.  
b.) Offerors who intend to use Subcontractors shall check the applicable "YES" box and follow the instructions. **Offers that do not include the following required documents shall be deemed non-compliant or nonresponsive as applicable, and the Offeror's submission may not be considered for award.**

☒ **NO, I DO NOT intend to use Subcontractors/Sub-consultants.**

**Instructions:** Offerors that do not intend to use Subcontractors shall complete and sign this form below (Subcontracting/Sub-Consulting ("Subcontractor") Utilization Form) and include it with their sealed Offer.

☐ **YES, I DO intend to use Subcontractors /Sub-consultants.**

**Instructions:** Offerors that do intend to use Subcontractors shall complete and sign this form below (Subcontracting/Sub-Consulting ("Subcontractor") Utilization Form), and follow the additional Instructions in the (Subcontracting/Sub-Consulting ("Subcontractor") Utilization Plan). Contact SMBR if there are any questions about submitting these forms.

Offeror Information			
Company Name	Stearns, Conrad and Schmidt, Consulting Engineers, Inc.		
City Vendor ID Code			
Physical Address	8107 Springdale Road, Suite 108		
City, State Zip	Austin, TX 78724		
Phone Number	512-440-1888	Email Address	rfusilier@scsfieldservices.com
Is the Offeror City of Austin M/WBE certified?	<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES      Indicate one: <input type="checkbox"/> MBE <input type="checkbox"/> WBE <input type="checkbox"/> MBE/WBE Joint Venture		
<p><b>Offeror Certification:</b> I understand that even though SMBR did not assign subcontract goals to this Solicitation, I will comply with the City's M/WBE Procurement Program if I intend to include Subcontractors in my Offer. I further agree that this completed <b>Subcontracting/Sub-Consulting Utilization Form</b>, and if applicable my completed <b>Subcontracting/Sub-Consulting Utilization Plan</b>, shall become a part of any Contract I may be awarded as the result of this Solicitation. Further, if I am awarded a Contract and I am not using Subcontractor(s) but later intend to add Subcontractor(s), before the Subcontractor(s) is hired or begins work, I will comply with the City's M/WBE Procurement Program and submit the <b>Request For Change</b> form to add any Subcontractor(s) to the Project Manager or the Contract Manager for prior authorization by the City and perform Good Faith Efforts (GFE), if applicable. I understand that, if a Subcontractor is not listed in my <b>Subcontracting/Sub-Consulting Utilization Plan</b>, it is a violation of the City's M/WBE Procurement Program for me to hire the Subcontractor or allow the Subcontractor to begin work, unless I first obtain City approval of my <b>Request for Change</b> form. I understand that, if a Subcontractor is not listed in my <b>Subcontracting/Sub-Consulting Utilization Plan</b>, it is a violation of the City's M/WBE Procurement Program for me to hire the Subcontractor or allow the Subcontractor to begin work, unless I first obtain City approval of my <b>Request for Change</b> form.</p>			
Ronald L. Wilks / Vice President		 6/5/2018	
Name and Title of Authorized Representative (Print or Type)		Signature/Date	



**ADDENDUM  
LANDFILL GAS COLLECTION SERVICES  
CITY OF AUSTIN, TEXAS**

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**Solicitation: RFP 1500 SLW3000**

**Addendum No: 1**

**Date of Addendum: 5/25/2018**

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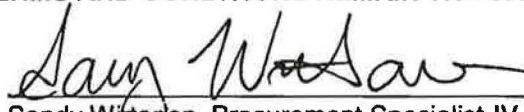
This addendum is to incorporate the following changes to the above referenced solicitation:

**I. Additional Information:**

- 1) The Pre-Proposal sign in log is attached.

**II. ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME.**

APPROVED BY:

  
Sandy Wintanen, Procurement Specialist IV  
Purchasing Office, 512-974-7711

5/25/18  
Date

ACKNOWLEDGED BY:

Ronald L. Wilks  
Name

  
Authorized Signature

6/5/2018  
Date

**RETURN ONE COPY OF THIS ADDENDUM TO THE PURCHASING OFFICE, CITY OF AUSTIN, WITH YOUR RESPONSE OR PRIOR TO THE SOLICITATION CLOSING DATE. FAILURE TO DO SO MAY CONSTITUTE GROUNDS FOR REJECTION.**



**ADDENDUM  
LANDFILL GAS COLLECTION SERVICES  
CITY OF AUSTIN, TEXAS**

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**Solicitation: RFP 1500 SLW3000      Addendum No: 2      Date of Addendum: 5/25/2018**

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This addendum is to incorporate the following changes to the above referenced solicitation:

**I. Questions and Answers:**

**Q1: Is it correct that there are 35 pumps total for the gas and leachate systems and that all must be removed and cleaned two times per year?**

A1: Yes, there are 35 total pumps in the leachate collection system along Onion Creek, three subtitle D landfill units, and sumps for methane flare.

**Q2: Is the Contractor responsible for earthwork if necessary to reduce oxygen intrusion?**

A2: City of Austin staff has heavy equipment on site and will be responsible for earth work, hauling, fill, and grading of the area for any oxygen intrusion discovered by the Contractor on final cover. The Contractor is responsible for marking the area that was determined to cause the oxygen intrusion. The Contractor will notify the City of Austin of any leaking or intrusion into the methane wells and/or piping. This would be non-routine maintenance repair in the contract for any repair on the well and methane piping that has been found to cause oxygen intrusion in the methane gas system.

**Q3: Are there replacement flow meters for when meters must be shipped off for calibration?**

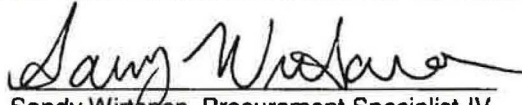
A3: There are no replacement flow meters on site for recalibration. The Contractor will have to secure rental or leased replacement meters prior to sending one for calibration.

**Q4: Is there a spill plan (eg. SPCC) for the site?**

A4: Yes, the City of Austin has a Leachate and Contaminated Water Plan in the MSW Permit 360-A in the City of Austin Operating plan approved by the TCEQ. The City of Austin also has a spill plan submitted to the Austin Water Industrial Waste department for our leachate transportation plan submitted yearly to Austin Water for industrial waste requirements. The City of Austin also has a storm water plan pertaining to spills. The Contractor will be responsible for any fluid leaks from their equipment or vehicles while on site and must notify the City of any spill or leak occurring from their vehicles. The contaminated dirt would be the Contractor's responsibility to remove and dispose of.

**II. ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME.**

APPROVED BY:

  
Sandy Wirtanen, Procurement Specialist IV  
Purchasing Office, 512-974-7711

5/25/18  
Date

ACKNOWLEDGED BY:

Ronald L. Wilks  
Name

  
Authorized Signature

6/5/2018  
Date

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**ADDENDUM  
LANDFILL GAS COLLECTION SERVICES  
CITY OF AUSTIN, TEXAS**

**Solicitation: RFP 1500 SLW3000**

**Addendum No: 3**

**Date of Addendum: 6/4/2018**

This addendum is to incorporate the following changes to the above referenced solicitation:

**I. Clarification:**

- 1) The 0600A Price Sheet has been replaced in its entirety as **VERSION 2 Price Sheet**. Only proposals submitted with the revised price sheet will be accepted.

**II. Questions and Answers:**

**Q1: Will monitoring of the three vent pipes associated with the recently installed vent trench also be required?**

A1: Yes. There are 60 methane recovery wells, 11 curtain wells, 3 leachate riser wellheads, 8 passive vents, and the 3 newly installed vents near GP 17, area B.

**Q2: Section 3.1.1 appears to be addressed under Section 3.2. For general response purposes, may this subsection be "ignored" since the required services are also described in Section 3.2?**

A2: As long as all items mentioned are monitored according to Section 3.

**Q3: Items G and H of subsection 3.1.4 appear to be redundant. Are they intended to specify different types of measurements?**

A3: No.

**Q4: Items J-M of subsection 3.1.4 pertain to monitoring of gas probes, monitoring wells, etc. As noted above, these services appear to be addressed under Section 3.2.**

A4: That is correct.

**Q5: Item N in 3.1.4 is a very broad statement which potentially requires compliance with policies and regulations outside the scope of services for this project. Would the City consider omitting this item from the scope of accepting alternate language?**

A5: We can allow a language change as long as it would address any new regulations that could affect the landfill.

**Q6: In addition to documenting flow using pitot tube measurement, does the City also want the flow meter reading at the time of monitoring recorded?**

A6: Yes.

**Q7: Is downloading of the data logger at the time of monitoring required?**

A7: The Contractor should have the ability to have data available for any required reporting requirement.

**Q8: In reference to Section 3.1.8, will attendance at meetings with TCEQ be compensated as non-routine services (Line Item 14 of Section 0600A) or should the Contractor account for possible attendance as part of its routine services? Whether part of routine services or compensated as non-routine services, who should the Contractor assume will be required to attend such meetings (Project Manager, Project Manager and Technician, etc.)?**

A8: Non-routine services. The Contractor should have available any level staff that is able to discuss technical aspects of the liner failure with TCEQ.

**Q9: In Section 3.2, "The Contractor shall complete quarterly operations and maintenance, inspections, and services to the GCCS collection pump and sump O&M system." refers to the GCCS; however, the remainder of the section pertains to quarterly methane monitoring for probes and related features. Should this statement be deleted or moved to another section of the document?**

**A9: It will be left as stated.**

**Q10: In reference to Section 3.2.1.A, the Contractor does not control the operation of the landfill and therefore can "determine" but not "ensure" that concentrations do not exceed regulatory requirements. Can this wording be modified to clarify that the Contractor is responsible for determining if concentrations exceed applicable limits?**

**A10: It may be revised to "Monitor concentrations of methane gas to determine that methane concentration does not exceed volumes as defined."**

**Q11: In reference to Section 3.2.1.C and D, it is unclear what the expectations are relating to documenting soil, hydro-geologic, and hydraulic conditions. Such conditions are applicable to design and installation of the probe monitoring network. With the excepting of weather, will the City consider removal of these items from the quarterly monitoring requirements?**

**A11: The City would consider removing Item D.**

**Q12: In Section 3.3 should the sentence "The Contractor shall complete semi-annual inspections, services, and monitoring of leachate with gas control systems." include "and condensate control systems" after "leachate"?**

**A12: Yes.**

**Q13: In Section 3.3.1, item B indicates that pumps are to be removed and cleaned; however, the second sentence of this section indicates that the "Contractor shall not remove the pump unless it has failed." Could the City clarify the scope for pump maintenance?**

**A13: Item B can be revised to "Perform visual inspections of above ground controls; and"**

**Q14: Section 3.4.2 appears to be a very broad statement which would require the Contractor to comply with requirements outside the scope of services of this project. Will the City consider rewording this subsection to limit compliance to applicable regulatory requirements?**

**A14: We can allow a language change as long as it would address any new requirements that would be applicable to the site during the life of the contract.**

**Q15: In reference to Section 4.4, the wording of this section is very general and implies spills and leaks outside the scope of services (e.g., leachate disposal). Would the City consider omitting this section from the scope of work given that the Contractor will not be transporting any materials to or from the landfill? If not, can the wording be modified to limit cleanup specifically to spills/leaks associated with the scope of services (e.g., oil spillage during compressor oil changes)?**

**A15: Modified wording can be given. The Contractor will be responsible for any fluid leaks from their equipment or vehicles while on site and must notify the City of any spill or leak occurring from their vehicles.**

**Q16: In reference to Section 4.4.1, does the statement require the Contractor's personnel to have all of these spill kits in their possession while providing services at the landfill? Can this statement be modified to require only materials to be carried for cleanup of spills/leaks which might occur in the course of providing the services described in the scope?**

**A16: The Contractor needs to be able to respond to spills and leaks from their equipment and vehicles as they occur. The Contractor will not be responsible for spills and leaks from City of Austin equipment and vehicles.**

**Q17: Item No. 1 of the price sheet requires "monitoring of the methane gas content per EPA Greenhouse Gas Reporting Rules." Does this imply that the costs for annual greenhouse gas reporting (Section 3.4) should be included in this line item or did the City intend to provide a separate line item for this reporting?**

A17: It should be included.

**Q18: Item No. 4 of the price sheet shows an estimated quantity of 52. Per Section 3.5, should the estimated quantity actually be 2?**

A18: This was included in the case that weekly monitoring is required for high methane levels. The City doesn't anticipate using weekly monitoring for the life of the contract; however, it is a possibility.

**Q19: Item No. 6 of the price sheet has an estimated quantity of 8. Is this per tube replaced per tank or for replacement of the tubes on both tanks? In other words, if the tubes on both tanks are replaced at the same time, would that "use up" one or two of the estimated annual quantity for that line item?**

A19: The tubes will be replaced as needed while the Contractor is on site, so no additional service call will be necessary. The estimated usage is per tube replaced per tank, so in the case above, two items would be "used up".

**Q20: Do the hourly rates for Item No. 9 and Item No. 10 of the price sheet need to account for vehicle usage, hand tools, and monitoring equipment which might be needed in the course of providing typical non-routine services? What about other more specialized equipment such as generators and fusion machines for pipe repair work?**

A20: Yes, all equipment and tools need to be accounted for.

**Q21: Is the hourly rate for Item No. 14 of the price sheet intended for professional personnel (e.g., Project Managers) or field personnel (e.g., field technician) or both?**

A21: Hourly rates should be included for each staff type.

**Q22: Although listed under Section 3.5, Items B, C, E, F, and G do not appear to have line items on the price sheet. Will they be added to the price sheet or are they already covered under one or more line items in the price sheet?**

A22: They have been added in Version 2 of the price sheet that has replaced the original price sheet.

**II. ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME.**

APPROVED BY:

  
Sandy Wirtanen, Procurement Specialist IV  
Purchasing Office, 512-974-7711

6/4/18  
Date

ACKNOWLEDGED BY:

Ronald L. Wilks  
Name

  
Authorized Signature

6/5/2018  
Date

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**TAB 3**  
**AUTHORIZED NEGOTIATOR**

## AUTHORIZED NEGOTIATOR

### **Name and Title**

Ronald L. Wilks, Vice-President, SCS Field Services

### **Addresses and Telephone Numbers**

8107 Springdale Road, Suite 108, Austin, Texas 78724

1501 Central Drive, Bedford, Texas, 76021

Direct Office: 512-879-4042

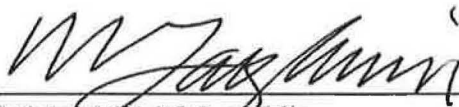
Cell Phone: 817-235-4608

\*See attached authorization

## CERTIFICATE

I, Michael W. McLaughlin, certify that I am the Secretary of Stearns, Conrad and Schmidt, Consulting Engineers, Inc. (dba SCS Field Services), that Ronald L. Wilks is a Vice President of Stearns, Conrad and Schmidt, Consulting Engineers, Inc., and that, as such, he is authorized by the Board of Directors of Stearns, Conrad and Schmidt, Consulting Engineers, Inc. to enter into bids and proposals not exceeding One Million Dollars (\$1,000,000) in value. Said authority was given by resolution of the Board of Directors of Stearns, Conrad and Schmidt, Consulting Engineers, Inc. at a meeting held on November 5, 2011, which resolution remains in full force and effect.

[SEAL]

  
\_\_\_\_\_  
Michael W. McLaughlin  
Secretary  
Stearns, Conrad and Schmidt, Consulting Engineers, Inc.  
December 21, 2011

**TAB 4**  
**BUSINESS ORGANIZATION**



## BUSINESS ORGANIZATION

### Full Name and Address

Stearns, Conrad and Schmidt Consulting Engineers, Inc  
(dba's SCS Engineers, SCS Field Services, SCS Energy, SCS Tracer Environmental, SCS  
Aquaterra)

3900 Kilroy Airport Way, Suite 100  
Long Beach, California 90806-6816

### Branch Office Which Will Perform Work

SCS Field Services  
8107 Springdale Road, Suite 108  
Austin, Texas 78724

### Type of Company

Corporation

### Incorporation State

Virginia



**TAB 5**  
**EXPERIENCE**



## Tab 5 – Experience

### FM 812 Landfill

Related Experience  
for GCCS O&M, LMS O&M,  
LFG Migration Monitoring System,  
and Related Services

Presented To:



#### **CITY OF AUSTIN**

124 West 8<sup>th</sup> Street  
Room 308  
Austin, Texas 78701  
(512) 974-2500

Presented By:

#### **SCS FIELD SERVICES**

8107 Springdale Road  
Suite 108  
Austin, Texas 78724  
(512) 440-1888

June 5, 2018  
Proposal No. 070105218

Offices Nationwide  
[www.scsengineers.com](http://www.scsengineers.com)

## Tab 5 – Experience

### FM 812 Landfill

#### Related Experience for GCCS O&M, LMS O&M, LFG Migration Monitoring System, and Related Services

Presented To:

**CITY OF AUSTIN**

124 West 8<sup>th</sup> Street

Room 308

Austin, Texas 78701

(512) 974-2500

Presented By:

**SCS FIELD SERVICES**

8107 Springdale Road

Suite 108

Austin, Texas 78724

(512) 440-1888

June 5, 2018

Proposal No. 070105218

## SECTION 1 INTRODUCTION

Founded in 1970, SCS Engineers and Field Services (SCS) is an employee-owned, environmental engineering, operation and maintenance, and construction firm. For SCS, solid waste management services represent approximately 75% of all business. These services include municipal solid waste (MSW) landfill design and permitting; landfill gas system design and operation; remedial activities; air quality services, especially relating to landfills; and groundwater and gas probe monitoring services. Today, SCS employs more than 800 individuals in 40 offices nationwide. By applying its expertise while maintaining close communications with clients, SCS is able to develop value-added solutions that are responsive to clients' needs and environmental concerns. To address the increasing complexities in solid waste services practices, SCS continuously expands its technical staff to maintain full-service capabilities.

## SECTION 2 SITE-SPECIFIC WORK EXPERIENCE

SCS has extensive past and current experience relevant to the work involved with this project. The projects described below are limited to projects in Texas with which personnel that will participate in this project for the City of Austin (COA) have been involved and which, in most cases, are still ongoing.

### COA FM-812 Landfill – Austin, Texas

**GCCS O&M Services; Leachate Management System (LMS) O&M Services; Gas Probe Monitoring; GCCS Evaluation; GCCS Expansion Design, Permitting, and Installation; LFG Migration Control System Design, Permitting, and Installation; GHG Reporting**

**Client:** COA Austin Resource Recovery  
**Contact:** Mr. Conley Leloux, Waste Management Program Manager  
**Phone:** (512) 243-3325 / **E-Mail:** conley.leloux@austin.gov  
**Address:** 10108 FM-812  
Austin, Texas 78719

**SCS Staff:** Ron Wilks, Rusty Fusilier, Joe Ortiz, Jason Lewallen, Rocky Morrison, David Mezzacappa  
**Status:** Ongoing  
**Time Period:** 2004 – Present

The scope of services to the COA for the closed FM-812 Landfill has included the following:

- O&M services related to the GCCS including blower/flare station (BFS) O&M; wellfield monitoring; condensate sump monitoring; flow meter installation and recalibration; data logger installation; and miscellaneous system repairs and troubleshooting. Management of collected data and reporting of O&M services has also been performed.



- O&M services related to the LMS including pump removal and maintenance/replacement; pressure transducer replacement; control panel troubleshooting; and pipe repairs.
- Design, permitting, and installation of a vacuum curtain well system to intercept LFG migrating toward a groundwater monitoring well. The 11-well system included a sump to collect LFG condensate was initially connected to the existing GCCS.
- Gas probe monitoring services involving the quarterly monitoring of probes, wells, piezometers, and structures at the landfill and reporting of monitoring results. Also, performance of follow-up monitoring and reporting and implementation of mitigation activities to mitigate LFG migration at monitoring probe.
- GCCS evaluation services to determine options for improving the efficiency of the GCCS to increase the quantity and quality of collected LFG. This evaluation resulted in recommendations that included installation of new wellheads; addition of new and replacement LFG extraction wells; tie-in of leachate risers to the GCCS; and other improvements.
- Implementation of GCCS improvements determined from the GCCS evaluation (see above). These improvements included installation of new wellheads on over 50 wells; installation of a mini-blower to serve the vacuum curtain wells; installation of four new wells and replacement of four existing wells; installation of wellheads on three leachate risers and connection to the GCCS; and installation of a pneumatic pumps in the four condensate sumps and in five leachate extraction wells.
- Greenhouse Gas (GHG) reporting services to comply with the Federal Mandatory GHG Reporting Rule. GHG emissions were calculated and reported on required forms to the U.S. EPA. A memo was then submitted to the COA with backup calculations and assumptions.

#### **Travis County (Highway 290E) Landfill – Austin, Texas**

#### **LMS O&M; Leachate Control System Installation; Leachate Sampling; Landfill Post-Closure Maintenance**

**Client:** Travis County Transportation and Natural Resources  
**Contact:** Mr. Keith Coburn, Environmental Project Manager  
**Phone:** (512) 854-5866 / **E-Mail:** keith.coburn@co.travis.tx.us  
**Address:** P.O. Box 1748  
Austin, Texas 78767-1748

**SCS Staff:** Rusty Fusilier, Joe Ortiz, Jason Lewallen, Rocky Morrison  
**Status:** Ongoing  
**Time Period:** 2004 – Present

The scope of services to Travis County for the closed Highway 290E Landfill has included the following:

- O&M services related to the LMS including weekly/monthly system inspections; leachate extraction well maintenance and repair; pump panel repair and troubleshooting; pipe repairs and replacement; and other related services. Weekly and monthly reports of inspections were also prepared and provided.
- Installation of a leachate trench to intercept subsurface liquids potentially migrating offsite. This work involved the installation of two six-foot deep trenches with pipe, gravel, and filter fabric that had a combined length of about 1500 feet. Later, tanks were added at both ends of one of the trenches to provide additional storage capacity for collected liquids.
- Collection of leachate samples. Samples of leachate are collected quarterly in compliance with the site-specific wastewater discharge permit and submitted for analysis. Analytical data is incorporated in a semiannual report that has to be submitted to the COA.
- Additional post-closure maintenance services. In addition to the services above for the closed landfill, managing of mowing and trimming services is provided. Also, road maintenance activities are managed.

#### **Waste Connections Seabreeze Environmental Landfill – Angleton, Texas**

**GCCS O&M; LMS O&M; Gas Probe Monitoring; GCCS Expansion Construction Quality Assurance (CQA); GCCS/LMS Evaluation; Surface Emissions Monitoring (SEM); New Source Performance Standards (NSPS)/Title V Reporting**

**Client:** Waste Connections  
**Contact:** Mr. Dave Matthews, Landfill Manager  
**Phone:** (979) 864-4442 / **E-Mail:** davidma@wasteconnections.com  
**Address:** 10310 FM 523  
Angleton, Texas 77516

**SCS Staff:** Ron Wilks, Rusty Fusilier, Joe Ortiz, Jason Lewallen, Rocky Morrison, David Mezzacappa  
**Status:** Ongoing  
**Time Period:** 2009 – 2010; 2014 – Present

The scope of services to Waste Connections (WC) for the Seabreeze Environmental Landfill has included the following:

- O&M services related to the GCCS including BFS O&M; wellfield monitoring; condensate sump monitoring; flow meter installation and recalibration; data logger

installation; and miscellaneous system repairs and troubleshooting. Management of collected data and reporting of O&M services has also been performed.

- O&M services related to the LMS including pump removal and maintenance/replacement; pressure transducer replacement; and pipe repairs.
- Gas probe monitoring services involving the quarterly monitoring of probes and structures at the landfill and reporting of monitoring results.
- CQA services during expansion of the GCCS. Continuous monitoring and documentation of expansion work was provided to ensure conformance with construction plans.
- GCCS and LMS evaluation services to determine needed repairs to improve the efficiency of both systems. This evaluation resulted in recommendations that included removal and cleaning of pneumatic pumps in condensate sumps and wells; capping of several abandoned wells; replacement of many well flex hoses before they began leaking; elimination of excessive vegetation around leachate risers; and repair of vacuum lines serving some leachate risers.
- SEM services on a quarterly basis in compliance with New Source Performance Standards (NSPS) requirements. These services included surface scans of the landfill footprint served by the GCCS for emissions of non-methane organic compounds and reporting of this monitoring.
- NSPS/Title V reporting services to comply with regulatory and permit requirements. These reports included NSPS, Startup/Shutdown/Malfunction (SSM), compliance certification, and deviation reports.

#### **City of Brownsville Landfill – Brownsville, Texas**

#### **GCCS O&M; GHG Reporting; GHG Credit Quantification Plan; Drainage System Repairs**

**Client:** City of Brownsville  
**Contact:** Mr. Martino Trevino, Superintendent  
**Phone:** 956-547-6571 / **E-Mail:** mtrevino@cob.us  
**Address:** 6035 Jaime J. Zapata Avenue  
Brownsville, Texas 78521

**SCS Staff:** Rusty Fusilier, Joe Ortiz, Jason Lewallen, Rocky Morrison, David Mezzacappa  
**Status:** Ongoing  
**Time Period:** 2011 – Present



The scope of services to the City of Brownsville (COB) for the Brownsville Landfill has included the following:

- O&M services related to the GCCS including blower/flare station BFS O&M; wellfield monitoring; condensate sump monitoring; flow meter and gas analyzer recalibration; and miscellaneous system repairs and troubleshooting. Management of collected data and reporting of O&M services has also been performed.
- GHG reporting services to comply with the Federal Mandatory GHG Reporting Rule. GHG emissions were calculated and reported on required forms to the U.S. EPA. A memo was then submitted to the COB with backup calculations and assumptions.
- GHG credit quantification plan preparation. This plan was prepared to quantify the reduction of emissions of GHG at the landfill. The City may then seek issuance of GHG reduction credits under the Climate Action Reserve. To provide the City with this opportunity, additional BFS data is collected and documented in conjunction with monthly GCCS O&M services.
- Implementation of drainage system repairs. Letdown structures at the landfill that were damaged during heavy rains were repaired by installing geomembrane materials in the channels and anchoring as needed.

#### **Waste Management Central Texas Landfills – Austin/New Braunfels/San Antonio, Texas**

##### **Surface Emissions Monitoring (SEM) Services; Wellfield Monitoring Services**

**Client:** Waste Management  
**Contact:** Mr. Phil Duncan, Gas Operations Manager  
**Phone:** (512) 272-6221 / E-Mail: pduncan@wm.com  
**Address:** 9900 Giles Lane  
Austin, Texas 78754

**SCS Staff:** Rusty Fusilier, Joe Ortiz  
**Status:** Ongoing  
**Time Period:** 2013 – Present

The scope of services to Waste Management (WM) for the Central Texas Landfills has included the following:

- SEM services on a quarterly basis at WM landfills in Austin, New Braunfels, and San Antonio in compliance with NSPS requirements. These services included surface scans of the landfill footprints served by the GCCS for emissions of non-methane organic compounds and reporting of this monitoring.



- Wellfield monitoring services at WM landfills in New Braunfels and San Antonio. Monitoring and tuning was performed in conformance with NSPS requirements, and data was provided directly to WM. Services were provided on an as-needed basis.
- Depth measurements were taken in LFG extraction wells at WM landfills in Austin, New Braunfels, and San Antonio to assess well integrity and available wellscreen for LFG removal.

### **Rigsby Avenue Landfill – San Antonio, Texas**

#### **Landfill Gas (LFG) Migration Investigation; GCCS Evaluation; Design, Installation, Maintenance, and Tuning of LFG Migration Control System; Flare Maintenance and Repair Services; Landfill Post-Closure Maintenance**

**Client:** City of San Antonio Environmental Services Department  
**Contact:** Mr. Michael Ortiz, Assistant Solid Waste Manager  
**Phone:** (210) 207-6440 / E-Mail: michael.ortiz@sanantonio.gov  
**Address:** 2755 Rigsby Avenue  
San Antonio, Texas 78222

**SCS Staff:** Ron Wilks, Rusty Fusilier, Joe Ortiz  
**Status:** Ongoing  
**Time Period:** 2004 – 2007; 2015 – Present

The scope of services to the City of San Antonio (COSA) for the closed Rigsby Avenue Landfill has included the following:

- Investigation of off-site LFG migration, as indicated from monitoring of the existing perimeter migration monitoring system operated by the COSA. Investigation activities included installation of temporary gas monitoring probes in the vicinity of migration; migration monitoring concurrent with system tuning; assessment of proximity of waste to property boundary; and limited pump tests to evaluate LFG recharge in monitoring probes at locations of off-site migration.
- Design, permitting, and installation of a perimeter migration control system for an area of the landfill subject to periodic off-site migration of LFG. The migration control system was comprised of a line of shallow, small diameter gas extraction wells installed parallel to the property boundary and associated piping. A low vacuum placed on the individual wells created a vacuum curtain along the property boundary that proved successful in eliminating LFG migration at that location. LFG collected by the vacuum curtain was incinerated in the on-site flare.
- Miscellaneous O&M and construction activities, including wellhead and pipe repairs; regrading and repair of LFG collection pipes; flare station repairs; migration system construction; and other activities such as training of COSA technicians.

**West Avenue Landfill – San Antonio, Texas****LFG Migration Investigation; GCCS Evaluation; Design, Installation, Maintenance, and Tuning of LFG Migration Control System**

**Client:** City of San Antonio Environmental Services Department  
**Contact:** Mr. Michael Ortiz, Assistant Solid Waste Manager  
**Phone:** (210) 207-6440 / E-Mail: michael.ortiz@sanantonio.gov  
**Address:** 2755 Rigsby Avenue  
San Antonio, Texas 78222

**SCS Staff:** Ron Wilks, Rusty Fusilier, Joe Ortiz, David Mezzacappa  
**Status:** Ongoing  
**Time Period:** 2004 – 2007; 2015 – Present

The scope of services to the City of San Antonio (COSA) for the closed West Avenue Landfill has included the following:

- Investigation of off-site LFG migration, as indicated from monitoring of the existing perimeter migration monitoring system operated by the COSA. Investigation activities included monitoring of existing gas probes in the area of migration and evaluation of existing system tuning.
- Design, permitting, and installation of additional LFG extraction wells to control off-site migration of LFG. These wells were installed to supplement the existing GCCS at the landfill. Collected LFG was incinerated in the on-site flare.
- Miscellaneous O&M and construction activities, including wellhead and pipe repairs; re-orientation and repair of LFG collection pipes; flare station repairs; and other activities.

**Nelson Gardens Landfill – San Antonio, Texas****LFG Blower/Flare Station (BFS) Improvements**

**Client:** City of San Antonio Environmental Services Department  
**Contact:** Mr. Michael Ortiz, Assistant Solid Waste Manager  
**Phone:** (210) 207-6440 / E-Mail: michael.ortiz@sanantonio.gov  
**Address:** 2755 Rigsby Avenue  
San Antonio, Texas 78222

**SCS Staff:** Ron Wilks, Rusty Fusilier, Joe Ortiz, David Mezzacappa  
**Status:** Ongoing  
**Time Period:** 2015 – Present

The scope of services to the City of San Antonio (COSA) for the closed Nelson Gardens Landfill has included the following:

- Improvements to the BFS, including installation of control panel components and a new flow meter for measuring LFG flow rates and volumes.

**Cefe Valenzuela Landfill – Corpus Christi, Texas****GCCS O&M; Surface Emissions Monitoring (SEM); New Source Performance Standards (NSPS)/Title V Reporting**

**Client:** City of Corpus Christi  
**Contact:** Mr. Tony Benavides, Disposal and Environmental Compliance Superintendent  
**Phone:** (361) 826-1633 / E-Mail: tonyb@cctexas.com  
**Address:** P. O. Box 9277  
Corpus Christi, Texas 78469-9277

**SCS Staff:** Ron Wilks, Rusty Fusilier, Joe Ortiz, David Mezzacappa  
**Status:** Ongoing  
**Time Period:** 2017 – Present

The scope of services to the City of Corpus Christi for the Cefe Valenzuela Landfill included the following:

- O&M services related to the GCCS including BFS O&M; wellfield monitoring; condensate sump monitoring; flow meter installation and recalibration; data logger installation; and miscellaneous system repairs and troubleshooting. Management of collected data and reporting of O&M services has also been performed.
- SEM services on a quarterly basis in compliance with New Source Performance Standards (NSPS) requirements. These services included surface scans of the landfill footprint served by the GCCS for emissions of non-methane organic compounds and reporting of this monitoring.
- NSPS/Title V reporting services to comply with regulatory and permit requirements. These reports included NSPS, Startup/Shutdown/Malfunction (SSM), compliance certification, and deviation reports.

**J. C. Elliott Landfill – Corpus Christi, Texas****GCCS O&M Services**

**Client:** City of Corpus Christi  
**Contact:** Mr. Tony Benavides, Disposal and Environmental Compliance Superintendent  
**Phone:** (361) 826-1633 / E-Mail: tonyb@cctexas.com  
**Address:** P. O. Box 9277



**Corpus Christi, Texas 78469-9277****SCS Staff: Rusty Fusilier, Joe Ortiz****Status: Ongoing****Time Period: 2017 – Present**

The scope of services to the City of Corpus Christi for the J. C. Elliott Landfill has included the following:

- O&M services related to the GCCS including BFS O&M; wellfield monitoring; condensate sump monitoring; flow meter installation and recalibration; data logger installation; and miscellaneous system repairs and troubleshooting. Management of collected data and reporting of O&M services has also been performed.

**TAB 6**

**PERSONNEL AND  
PROJECT MANAGEMENT  
STRUCTURE**



## Tab 6 – Personnel and Project Management Structure

### FM 812 Landfill

#### Project Personnel Assignments and Management Structure for GCCS O&M, LMS O&M, LFG Migration Monitoring System, and Related Services

Presented To:



#### **CITY OF AUSTIN**

124 West 8<sup>th</sup> Street  
Room 308  
Austin, Texas 78701  
(512) 974-2500

Presented By:

#### **SCS FIELD SERVICES**

8107 Springdale Road  
Suite 108  
Austin, Texas 78724  
(512) 440-1888

June 5, 2018

Proposal No. 070105218

**Offices Nationwide**

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## Tab 6 – Personnel and Project Management Structure

### FM 812 Landfill

#### Project Personnel Assignments and Management Structure for GCCS O&M, LMS O&M, LFG Migration Monitoring System, and Related Services

Presented To:

**CITY OF AUSTIN**

124 West 8<sup>th</sup> Street

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Presented By:

**SCS FIELD SERVICES**

8107 Springdale Road

Suite 108

Austin, Texas 78724

(512) 440-1888

June 5, 2018

Proposal No. 070105218

## PROJECT MANAGEMENT STRUCTURE

The project will be done under the direction of Ron Wilks, Project Director. Day-to-day activities will be handled by Rusty Fusilier, P.E., Project Manager, who will serve as the primary contact with COA personnel. Joe Ortiz, Project Superintendent, will serve as the Lead Technician on the project and will report directly to Mr. Fusilier. He will also serve as a secondary contact with COA personnel in the event that Mr. Fusilier is unavailable. He will be supported in technician duties by Mr. Fusilier, who will serve as Backup Technician. Construction activities will be overseen by Jason Lewallen, Construction Manager, who will utilize Mr. Morrison, Maintenance Technician, to provide services. Construction work will be coordinated through Mr. Fusilier. Administrative activities will be handled by Katie Ewing, Sr. Project Administrator. Engineering services, including GHG reporting, will be managed by David Mezzacappa, P.E., Project Director. He will also serve as an additional secondary contact with COA personnel. The chart provided in the appendix of this tab provides the general structure for project management.

## KEY PROJECT PERSONNEL

While other SCS Engineers and Field Services (SCS) personnel may be involved in work activities associated with the City of Austin (COA) FM-812 Landfill (Site) from time to time, the key personnel that will provide or oversee routine services are indicated below:

Rusty Fusilier, P.E. – Project Manager with responsibility for day-to-day project activities including reporting and also communications with COA personnel.

Joe Ortiz – Superintendent / Lead Technician with responsibility for operation and maintenance (O&M) services at the Site including blower/flare station (BFS) O&M, wellfield O&M, and gas probe monitoring.

David Mezzacappa, P.E. – Project Director with responsibility for engineering services including GHG reporting as required by the Federal Mandatory Greenhouse Gas (GHG) Reporting Rule.

## KEY PERSONNEL QUALIFICATIONS

Summaries of the qualifications of these personnel are provided below:

**Rusty Fusilier, P.E. – Project Manager.** Mr. Fusilier has over 35 years of experience in municipal solid waste management that includes work in the regulatory, waste services, and consulting sectors. Mr. Fusilier's experience over the last fifteen years has concentrated on landfill gas collection and control system (GCCS) operation and maintenance (O&M) services and environmental monitoring projects. Also, his solid waste experience includes landfill cell design, management of landfill final cover construction, groundwater and landfill gas (LFG) monitoring program management, LFG collection system installations, and permit amendment applications. He has obtained regulatory approval for and implemented gas remediation projects



at multiple landfills. Mr. Fusilier has managed LFG projects at many landfills in Texas. Mr. Fusilier is familiar with the GCCS and leachate management system (LMS) at the COA FM-812 Landfill.

**Joe Ortiz – Superintendent / Lead Technician.** Mr. Ortiz has over 25 years of experience in the O&M of GCCS for municipal solid waste landfills, including sites with gas-to-energy operations. This experience includes BFS O&M, wellfield O&M, condensate and pumping systems O&M, and other related activities. He has also been involved in implementation and operation of gas migration control projects at multiple landfills. Other work experience includes LMS O&M; construction services pertaining to GCCS and LMS, and gas probe system monitoring and maintenance. Mr Ortiz has extensive groundwater monitoring experience, including sites at which low-flow sampling protocols are used. He has direct experience and knowledge of the GCCS and LMS at the COA FM-812 Landfill where he has served as the Lead Technician for the past ten years.

**David Mezzacappa, P.E. – Project Director.** Mr. Mezzacappa has over 25 years of experience in landfill engineering with over 15 years focused on Clean Air Act and LFG engineering and compliance work. He has prepared pre-construction and operating permits in Texas and numerous other states for landfills in non-attainment as well as attainment areas. He is familiar with the full range of air quality regulations that impact landfills, ranging from the newest GHG regulations to the New Source Performance Standards. His range of work with LFG as well as standard landfill and drainage design allows him to bring a knowledgeable perspective to his work. He has also managed a broad spectrum of other projects including Spill Prevention, Control, and Countermeasures (SPCC) Plans and environmental compliance management projects. He has previously overseen the preparation of reports for the COA FM-812 Landfill required by the Federal Mandatory GHG Reporting Rule.

## WORK RESPONSIBILITIES AND PROJECT TIME PERCENTAGES

With regard to work assignments and percentages of time persons will spend on the project, this information is provided below:

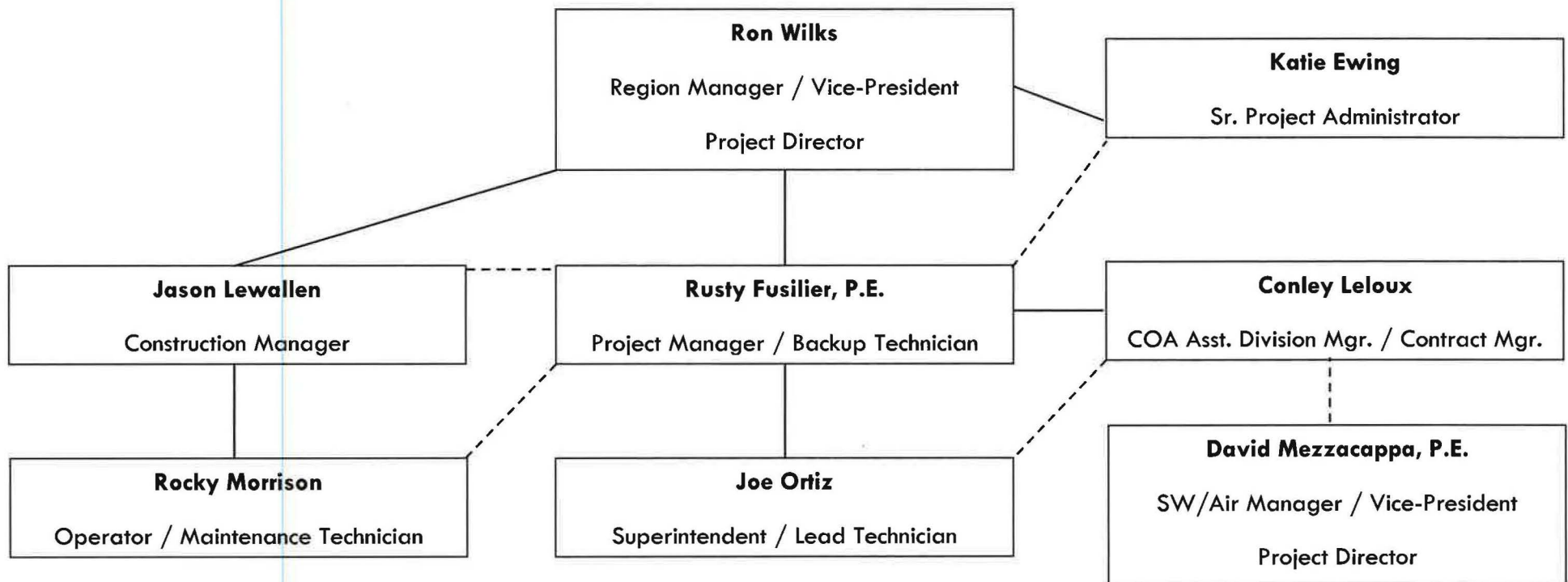
Name	Title	Primary Responsibilities	Time Devoted to Project as Percentage of Total Project Time (%)
Rusty Fusilier	Project Manager	Project management, scheduling, data review, report preparation, client communications	15
David Mezzacappa	Project Director	GHG reporting, LFG system design and permitting, LFGE support services	5
Jason Lewallen	Construction Manager	Management of construction-related services	2
Joe Ortiz	Lead Technician	Field activities including GCCS O&M, LMS O&M, and gas probe monitoring	75
Rocky Morrison	Maintenance Technician	Construction/repair-related services	5
Katie Ewing	Project Administrator	Invoicing, report distribution	3

## RESUMES

Resumes for the above SCS personnel and additional personnel that may on occasion assist with project activities are included in the appendix of this tab.

## **APPENDIX**

SCS FIELD SERVICES  
COA LANDFILL GAS COLLECTION O&M AND RELATED SERVICES  
PROJECT MANAGEMENT STRUCTURE



DIRECT REPORTING LINE ———

INDIRECT REPORTING LINE - - - - -

**RONALD L. WILKS****Education**

Graduate studies in Business Administration in Management Systems/Finance,  
University of Texas

Bachelor of Business Administration in Marketing/Personnel Management, Texas A&M,  
1989

**Professional Registrations/Certifications/Affiliations**

Hazwoper 40 Hour Training Course

Industrial Fire Fighting Course, Texas A&M Fire School 1974, 1975, 1981

Emergency Medical Training Industrial, 1974

Solid Waste Association of North America (SWANA)

Certified SWANA Instructor for the LFG Operation and Maintenance Course

Certified American Red Cross First Aid and CPR Training

**Professional Qualifications and Experience**

Mr. Wilks has over 28 years of experience in landfill systems design integration and installation in addition to 48 year's experience in automated control systems. Mr. Wilks is a Vice President for SCS Engineers' Operations, Maintenance, and Monitoring (OM&M) unit, with responsibilities encompassing all phases of environmental compliance as relating to landfills. He is responsible for managing personnel in the Field Services Central Region and is the client services manager for all aspects of projects including initial design requirements, coordination of designs, construction implementation, and operations management. Mr. Wilks has participated in multiple system design, installation and operations projects and is also the senior system trouble investigator for landfill gas (LFG) and leachate management systems, including all aspect of equipment and system operations.

In addition, Mr. Wilks has experience in not only routine operation of typical solid waste landfill systems but currently is responsible for directing remedial operations at several problematic sites. The problematic sites include sub surface oxidation events, high H<sup>2</sup>S sites and reactive sites.

**Project Management**

During the time Mr. Wilks has worked in the landfill business he has held multiple levels of operational and management roles ranging from the operations manager for a LGCCS construction company, the owner of a consulting and operations company, area manager for a major engineering company to currently an officer and regional manager of SCS Engineers OM&M division.



### Project experience includes:

- Involvement in multiple GCCS designs, system construction, operations and regulatory reporting over the past 28 years both while employed by other firms as well as owner of a landfill gas OM&M consulting firm. Currently provides constructability analysis for the engineering team for new GCCS designs.
- Managed a construction company directly involved with installation of landfill gas systems.
- Owned a consulting and construction company primarily doing OM&M services and small construction projects for landfills including landfill gas as well as designing, constructing and operating leachate management systems.
- Designed and installed remote telemetry systems for leachate management and disposal systems at multiple landfill sites.
- Served as project manager for multiple projects spanning multiple states with responsibilities to provide scheduling, personnel management, document origination and client interaction.
- Currently serves as the Regional Manager for OM&M and directs four (4) area managers responsible for operations, plus a light construction division based in Texas. His duties include new project origination, personnel management, project P&L oversight, client relations, regulatory agency interaction and new design quality control.

### Health and Safety

Mr. Wilks has participated in a certified health and safety program in compliance with OSHA Standard 29 CFR 1910.120. He is knowledgeable in incident response operations, team functions, personnel safety, and field equipment. He is able to recognize and evaluate potential chemical and physical hazards and associated risks in field operations, discuss and use personnel protective equipment such as respiratory protection and protective clothing, use and interpret direct-reading instruments, and examine and establish Standard Operating Safety Guidelines to ensure safe and effective response operations.

### Publications and Presentations

- *System Design and Cost Estimation for Municipal Landfill Gas Projects*, The Texas Solid Waste Management Conference, Austin, Texas 1992.
- *Wireless SCADA System Brings Sweet Smell of Success to Texas Landfills*, Advantage, Volume 12, Issue 5, May 1998.

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**WILLIS R. (RUSTY) FUSILIER, JR.**

**PROJECT MANAGER**

**Education**

BS – Civil Engineering (emphasis in environmental engineering), Texas A & M University, College Station, 1981

**Professional Licenses**

Professional Engineer – Texas (No. 59044)

**Specialty Certifications**

40-Hour Health and Safety Training, OSHA 29 CFR 1910.120  
CPR/First Aid Training

**Professional Affiliations**

American Society of Civil Engineers  
Solid Waste Association of North America

**Professional Experience**

Mr. Fusilier has worked in the municipal solid waste field since graduation from college. For his first seven years, he worked for the Texas Department of Health, the state agency responsible at that time for regulating municipal solid waste activities. His work assignments included conducting field inspections; providing resource recovery technical assistance; registering sludge land application sites; and issuing licenses for landfill operations personnel.

Following this period, he worked for a large private waste management company for ten years where he served as a landfill engineer initially responsible for operations in Arkansas and Oklahoma and then in Central Texas. His responsibilities included environmental compliance, permit management, management of environmental monitoring activities, and project management for major construction projects including waste disposal cells, leachate transfer and storage systems, and gas collection and control systems.

He next served as a project manager for SCS Engineers for two years where he performed due diligence reviews, prepared permit modifications, and participated in preparation of air permit applications for landfills. He then returned for three years as a landfill engineer/compliance manager for municipal solid waste landfills in Central Texas for the private waste management company for which he previously worked. After this period, he resumed working for SCS in the Field Services division where he has served as a project manager for environmental field services work associated with landfill operations since 2003.

Project experience includes:

### Permit Amendments and Modifications

- Managed preparation of permit modifications to upgrade landfill plans to Subtitle D standards in capacity as landfill engineer (1993 to 1994).
- Managed preparation of major permit amendment for expansion of Central Texas landfill in capacity as landfill engineer (1993 to 1995).
- Managed preparation of permit modification to reduce waste disposal footprint with no loss of disposal capacity of Central Texas landfill in capacity as landfill engineer (1994).
- Prepared permit modification to convert Type I Central Texas landfill to Type IV landfill (1998).
- Developed final cover quality control plan for use in final capping project at Central Texas landfill (1999).
- Prepared permit modification for installation of leachate force main at Central Texas landfill (2006).

### Waste Disposal Cell Construction

- Managed construction of final pre-Subtitle D five-acre waste disposal cell with clay-only liner and leachate collection systems for a Central Texas landfill in capacity as landfill engineer (1993).
- Managed construction of first Subtitle D three-acre waste disposal cell with composite liner and leachate collection systems for a Central Texas landfill in capacity as landfill engineer (1993).
- Managed construction of two-acre waste disposal cell with composite liner/leachate collection systems for a Central Texas landfill in capacity as landfill engineer (1995).
- Managed construction of eight-acre waste disposal cell with composite liner/leachate collection systems for a Central Texas landfill in capacity as landfill engineer (1997).
- Managed construction of nine-acre waste disposal cell with composite liner/leachate collection systems and one-acre leachate storage pond with composite liner system for a Central Texas landfill in capacity as landfill engineer (1998).
- Managed construction of eight-acre waste disposal cell with composite liner/leachate collection systems for a Central Texas landfill in capacity as landfill engineer (2000).
- Managed construction of nine-acre waste disposal cell with composite liner/leachate collection systems for a Central Texas landfill in capacity as landfill engineer (2001).



- Managed construction of seven-acre waste disposal cell with composite liner/leachate collection systems for a Central Texas landfill in capacity as landfill engineer (2001).

#### **Pre-Construction Air Permitting**

- Managed the preparation of pre-construction air permit for flare for Central Texas landfill in capacity as landfill engineer (2002).

#### **New Source Performance Standards Work (NSPS)**

- Managed completion of initial Tier 2 testing and report preparation for Central Texas landfill in capacity as landfill engineer (1996).
- Managed preparation of NSPS capacity reports, design plans, performance tests, and annual reports for Central Texas landfills in capacity as landfill engineer (1996 to 1998 and 2002 to 2003).

#### **Title V Operating Permit Work**

- Assisted in preparation of Title V permit applications for Central Texas landfills (1999 to 2000).

#### **Landfill Gas Mitigation Projects**

- Managed the installation of a landfill gas collection and control system to address gas migration issues at a Central Texas landfill and the later expansion of that same system in capacity as landfill engineer (1993).
- Managed the preparation of plans for and installation of landfill gas intercept trenches to address gas migration issues at two Central Texas landfills in capacity as landfill engineer (1995 and 1997).
- Managed the evaluation of a closed landfill in Central Texas to verify no ongoing gas migration and to confirm conditions were adequate to exclude site from ongoing post-closure care. Prepared report for submittal to state regulatory agency confirming proper closure of site (2005).
- Assisted with the design and installation of landfill gas intercept wells to address gas migration issues at a closed Central Texas landfill that were impacting groundwater quality (2009).

#### **Gas Collection and Control System Design, Evaluation, and Operations**

- Managed preparation of landfill gas system plans for landfill gas collection and control system installation and expansion at a Central Texas landfill in capacity as landfill engineer (1993 and 1998).

- Managed the evaluation of landfill gas collection and control systems at multiple Central Texas landfills and provided recommendations for improvements to systems to enhance gas collection efficiency (2008, 2011, and 2013).
- Managed operations and maintenance activities of gas collection and control systems for multiple landfills in Texas and surrounding states, including data compilation and review and reporting (2003 to present).
- Managed routine and non-routine surface emissions monitoring activities at multiple landfills in Texas and Oklahoma, including data compilation and review and reporting (2003 to present).

#### **Other Air-, Gas-, Groundwater-, and Surface Water-Related Activities**

- Managed groundwater monitoring programs for Central Texas Landfills including oversight of sampling and analysis activities and preparation and submittal of monitoring reports to state regulatory agency (1991 to 1998 and 2000 to 2003).
- Performed monitoring of landfill gas probes at Central Texas landfills and preparation and submittal of monitoring reports to state regulatory agency (1993 to 1998).
- Prepared landfill gas management plans for Central Texas landfills (1995 to 2003).
- Managed stormwater monitoring programs for Central Texas landfills, including sampling and facility inspections (1995 to 1998 and 2000 to 2003).
- Conducted odor surveys for Central Texas landfills (2002 to 2003).
- Compiled and issued semimonthly gas scorecards for Central Texas landfills (2003).
- Prepared startup, shutdown, and malfunction plans for Central and South Texas landfills (2003 and 2008 to 2009).
- Prepared semiannual Title V reports for Central Texas landfills (2003 and 2004).
- Managed maintenance activities for a closed Central Texas landfill equipped with a leachate extraction system, including inspection, sampling, and reporting activities (2003 to present).
- Performed pre-acquisition due diligence evaluation of gas collection and control system for South Texas landfill (2007).
- Assisted with training program for personnel operating gas collection and control system at South Texas landfill (2009).



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- EIT Roster** ([eitsearch.html](#))
- Firm Roster** ([firmsearch.html](#))

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### Status Glossary:

#### Valid for active engineering:

- **Active:**

*License is current and valid.*

#### Not valid for active engineering:

- **Delinquent:**

*Renewal is past due.*

- **Expired 90 Days:**

*License has been expired for 90 or more days, but is still renewable.*

- **Expired 1 Year:**

*License has been expired for at least 1 year, but is still renewable.*

- **Inactive:**

*License is current, but not valid for active engineering practice.*

Search for a licensed PE

**PE Number:**

59044

**Last Name:**

Fusilier

**First Name:**

Willis

**City:**

Georgetown

**State:**

TX - Texas ▼

**Employer:**

SCS Field Services

**Expiration:**

09-30-2018 ▼

**Branch:**

Civil ▼

**Status:**

Active ▼

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Page:

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**1**

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**FUSILIER, WILLIS RUTLEDGE JR.  
PE# 59044****Status**

Active

**Branch(s)**

Civil

**Granted**

12-20-1985

**Expires**

09-30-2018

**Employer(s)**

SCS Field Services (dba)

**Address/Phone**

2610 Grapevine Springs Cove  
Georgetown TX 78628  
PH#: 512-440-1888



DAVID J. MEZZACAPPA, P.E.

## EDUCATION

B.S., Civil Engineering, University of Texas at Arlington, 1992  
M.S.C.E. Coursework, University of Texas at Arlington, 1993-1994

## PROFESSIONAL REGISTRATIONS

Professional Engineer – Texas, Louisiana, Oklahoma, New Mexico, and Tennessee

## PROFESSIONAL EXPERIENCE

Mr. Mezzacappa has worked in the solid waste field since his senior year in college (over 25 years of experience) and has served as a design engineer and/or project manager for over years on many types of projects ranging from major permit expansion applications to landfill gas collection system design. He specializes in all aspects of Clean Air Act compliance for landfills, alternate final cover demonstrations, and erosion and soil loss modeling. He has prepared dozens of landfill permit modifications, several alternate liner demonstrations, gas and leachate management plans. He has worked on air-related projects in Texas, Oklahoma, Louisiana, Nevada, Pennsylvania, New Mexico, California, Alabama, and Arizona.

Prior to joining SCS in 1999, Mr. Mezzacappa worked with Rust Environment and Infrastructure in Houston and Dallas, and Freese and Nichols in Fort Worth.

The following is a partial listing of representative projects:

### NSR Air Permitting

- Prepared dozens of landfill standard permits and over 100 permits-by-rule in the State of Texas for MSW Landfills and other types of solid waste facilities - also familiar with Oil and Gas Standard Permits. Prior to these mechanisms also worked with Standard Exemptions, and other types of permits in Texas. Has also permitted transfer stations, painting facilities, hauling companies, recycling centers, and stand-alone landfill gas-to-energy facilities.

### Greenhouse Gas Data Gathering and Reporting

- Performed annual GHG reporting for landfills federally and in states since 2010. Performed data gathering for GHG for over two dozen landfills annually since 2010. Managed GHG data review for over 150 landfills for both private and public facilities.

### New Source Performance Standards Work (NSPS) for MSW Landfills

- Performed over 50 Tier 2 sampling and analyses in Texas, Louisiana, Oklahoma, New Mexico, Arizona, Utah, and Alabama both directly and as a manager. Was

involved in performing some of the first Tier 2 work in the country in the Dallas/Fort Worth area in 1994 with TNRCC promulgated rules implementing the proposed NSPS rules. Has prepared sampling plans, alternate Tier 3 analyses, and nitrogen waivers. Has worked extensively with all “front end” portions of NSPS compliance including Tier 1 design capacity reports and NMOC emissions rate calculations.

- Has prepared all phases of NSPS reporting including NSPS design plans for over a dozen facilities.
- Experienced in all phases of NSPS-related work including annual reports, and NSPS performance tests, waiver requests, and operations and maintenance aspects such as surface scans, and well operating parameters.

#### **Title V Operating Permit Work**

- Experienced with Title V permitting in Texas having prepared dozens of General Operating Permits for landfills - also experienced with filing Title V permits for industrial and oil and gas facilities. Has been working with Title V permitting for 20 years, specializing in landfill-related work.
- Performs annual and semi-annual Title V reporting for about 30 sites in Texas and Louisiana. Very familiar with all required forms and verifying whether any reportable events occurred.

#### **Gas Collection and Control System Design**

- Has prepared over 30 landfill gas collection and control system designs for many types of landfills across Texas, Louisiana, Oklahoma, and New Mexico. Has designed with different materials and many types of different configurations. Has designed gas systems for bioreactor landfills and many types of landfill gas-to-energy uses as well.
- Has designed pipelines (both HDPE and steel) for landfill gas-to-energy facilities (both direct-use and high-Btu).
- Has designed about one dozen perimeter migration mitigation systems including: active vacuum, passive vents, and passive trenches.

#### **Other Air-Related Work: Emissions Inventories and Audits**

- Has been performing annual emission inventory and fee work throughout Texas and all surrounding states currently handling approximately 40 sites per year. Has been performing inventory work for 20 years.
- Has performed multiple landfill audits for air quality requirements and been present for over a dozen inspections.

## PUBLICATIONS

“Air/GHG Regulations & Reporting Affecting MSW Landfills,” 2014 New Mexico Recycling and Solid Waste Integrating Solutions Conference, 2014.

“Importance of Landfill Fill Progression Planning and Placement of Intermediate Cover,” 21<sup>st</sup> Century Solid Waste Management Primer Training Course, 2014.

“LFG Collection and LFG Energy Technologies,” USEPA Landfill Methane Outreach (LMOP) Texas Workshop, 2013.

“When can Co-Located Facilities be Considered Separate Sources for Air Compliance Purposes – The Concept of Common Control,” SWANA Landfill Gas Symposium, 2011.

“EPA’s New Greenhouse Gas Reporting rules – What this Means for MSW Landfills”, TxSWANA Annual Conference, 2010.

“Landfill Gas Systems – A General Overview”, ASTSWMO State Solid Waste Managers Conference, 2005.

“Air Quality Pre-Construction Permits for MSW Landfills”, SWANA Annual Landfill Symposium, 2000.

Co-authored “Air Regulations and Their Impact on MSW Landfills” with Brian Dudley, P.E., Texas SWANA Regional Conference, 1997.

“Emissions Inventories for Municipal Solid Waste Landfills”, Options for Texas Conference, 1995.





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#### Valid for active engineering:

- **Active:**

*License is current and valid.*

#### Not valid for active engineering:

- **Delinquent:**

*Renewal is past due.*

- **Expired 90 Days:**

*License has been expired for 90 or more days, but is still renewable.*

- **Expired 1 Year:**

*License has been expired for at least 1 year, but is still renewable.*

- **Inactive:**

*License is current, but not valid for active engineering practice.*

Search for a licensed PE

**PE Number:**

82028

**Last Name:**

Mezzacappa

**First Name:**

David

**City:**

Bedford

**State:**

TX - Texas ▼

**Employer:**

SCS Engineers

**Expiration:**

12-31-2018 ▼

**Branch:**

Civil ▼

**Status:**

Active ▼

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Page:

**1**

Updated on:

**6-5-2018**

Matches:

**1**

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**MEZZACAPPA, DAVID JOEL**  
**PE# 82028****Status**

Active

**Branch(s)**

Civil

**Granted**

02-13-1997

**Expires**

12-31-2018

**Employer(s)**

SCS Engineers (dba)

**Address/Phone**1901 Central Dr Ste 550  
Bedford TX 76021  
PH#: 817-571-2288

**JASON LEWALLEN****LFG SYSTEM CONSTRUCTION AND OM&M PROJECT MANAGER****Education**

B.S. – Bio-Environmental Sciences and Microbiology, Texas A&M University, 1995

**Specialty Certifications**

Occupational Safety and Health Administration (OSHA) Hazardous Waste Operations Emergency (HAZWOPER) 40-Hour Training Certification - OSHA 29 CFR 1910.120.

OSHA HAZWOPER 8-Hour Hazardous Site Supervisor Training, OSHA 29 CFR 1910.120.

Certified Competent Person Awareness for Trench/Excavation Safety, OSHA CFR 1926.

Certified Electrical Troubleshooting and Preventative Maintenance.

Confined Space Entry Certified

Certified American Red Cross First Aid and CPR Training

HDPE Fusion Certification

Certified O&M for John Zink Flares

**Professional Experience**

Prior to joining SCS Field Services, Mr. Lewallen worked as a project manager in the residential and commercial construction industry for 13 years, overseeing the construction of custom homes, residential communities, and commercial buildings in and around the Dallas/Fort Worth, Texas area. During his tenure, he managed large residential projects with responsibilities including project budgeting, scheduling, sub-contractor negotiations/management, vendor procurement, client communications, and design management. In 2008, he joined the SCS Field Services team and merged his construction experience with his formal educational training and is now holding the position of Project Manager over Landfill GCCS Construction, OM&M, and Construction Quality Assurance (CQA) projects for the Central Region.

Mr. Lewallen currently provides SCS Field Services with expertise in management for both construction and OM&M projects including procurement, estimating, scheduling, budgeting, wellfield tuning, monitoring data analysis and sub-contractor management, as well as other administrative activities. He has been responsible for estimating and managing a wide range of landfill gas control system upgrades and expansion projects for both private and municipal entities. His specific experiences include work related to LFG collection systems monitoring and construction, extraction well construction, flare installations/upgrades, polyethylene (PE) pipe fusion, polyvinyl chloride (PVC) pipe installation, horizontal collection trenches, and condensate collecting/containment systems.

## Project Experience

- Mr. Lewallen has 9 plus years of experience serving as project manager responsible for planning, coordinating, and supervising a wide variety of GCCS projects involving LFG flare installations, new pipeline installations, existing system repairs and existing component modifications at both public and private landfills all across the central United States.
- He has 9 plus years of experience serving as project manager responsible for planning, coordinating, and supervising the installation of both vertical LFG extraction wells and horizontal LFG collectors for SCS at landfills all across the central United States.
- He has 9 plus years of experience as project manager overseeing numerous projects involving leachate management system installations, repairs, and troubleshooting at landfills all across the central United States.
- Mr. Lewallen has 4 plus years of experience as project manager for the SCS Field Services' Central Region Construction Quality Control Division. As well as 3 plus years of experience as acting OM&M Project Manager for the SCS Field Services' New Mexico Region landfills.
- Throughout his tenure, Mr. Lewallen has also served as project manager for the development, planning, and installation of numerous landfill gas migration mitigation systems at both public and private landfills across the central United States.

KATIE EWING

SENIOR PROJECT ADMINISTRATOR

### **Education**

Tarrant County College, Fort Worth, TX, Office Administration, 2006

### **Professional Experience**

Mrs. Ewing has over 10 years' worth of experience with SCS Field Services in the Operations, Maintenance, and Monitoring division (OM&M). Throughout this time she has performed all of the following activities:

- Report preparation, including compiling data and finalizing monthly reports for distribution.
- Circle chart analysis and calculating system downtime.
- Technical correspondence via email and telephone contact with clients and other SCS personnel.
- Invoicing; review draft invoices with project managers and prepare final invoice for clients.
- Equipment management.
- Purchasing; prepare and distribute purchase orders to vendors and/or field personnel; order goods and services.
- Accounting; downloading monthly reports, calling on aged accounts receivable, timesheets and expense report processing.
- Administration; assist with proposal preparation, maintain project, vendor and employee files; scheduling medical monitoring.



## WILLIAM "ROCKY" MORRISON

### SUPERINTENDENT

#### **Specialty Certifications**

40-Hour Health and Safety Training, OSHA 29 CFR 1910.120

Certified Competent Person Awareness for Trench/Excavation Safety, OSHA CFR 1926

HDPE Fusion Certification

EPG Pump Certification

Certified Electrical Troubleshooting and Preventative Maintenance

#### **Professional Experience**

Mr. Morrison provides SCS with over 11 years of field experience in landfill gas collection system construction and maintenance. His extensive experience in repairing and maintaining landfill gas collection and control systems (GCCS) is further supplemented with his experience in LFG wellfield data collection, surface emissions monitoring, as well as wellfield balancing, trouble shooting and maintenance.

During his tenure, Mr. Morrison has been acting superintendent on a wide range of landfill gas control system upgrades and expansion projects for both private and municipal entities. His specific experiences include work related to LFG collection systems, extraction well construction, flare installations/upgrades, polyethylene (PE) pipe fusion, polyvinyl chloride (PVC) pipe installation, horizontal collection trenches, and condensate collecting/containment systems.

Mr. Morrison's experience also includes over 12 years of experience in operating all types of heavy equipment commonly used during the construction of large landfill gas projects. As a lead operator for SCS-FS, Mr. Morrison commonly operates and directs the operation of heavy equipment such as excavators, dozers, loaders, articulated dumps and fork lifts.

**JOE ORTIZ****PROJECT SUPERINTENDENT****Professional Registrations**

40-Hour Health and Safety Training, OSHA 29 CFR 1910.120

Certified Electrical Troubleshooting and Preventative Maintenance

Certified in HDPE pipe welding and fusion

**Professional Experience**

Mr. Ortiz provides SCS Field Services with more than 23 years of experience in gas systems operation, monitoring, and maintenance (OM&M), with over 18 years of specific experience with landfill gas collection and energy recovery facility construction and OM&M.

Mr. Ortiz has extensive experience in the OM&M of landfill gas collection and control systems (GCCS). This experience includes balancing of extraction well fields, monitoring and maintenance of blower/flare station operations, and maintenance and repair of collection system components including wells, piping, and condensate sumps.

Mr. Ortiz has additional experience in other environmental monitoring activities. This experience includes surface emissions monitoring, landfill gas probe monitoring, leachate monitoring, and groundwater monitoring. Mr. Ortiz is also trained and experienced in the use of a portable gas chromatograph.

Mr. Ortiz has provided services at several municipal solid waste landfills in different states. Some of these landfills had GCCS subject to New Source Performance Standards (NSPS) and/or required to operate in accordance with standard operating procedures (SOP) including Republic Services.

Mr. Ortiz has also served as a safety coordinator. In this capacity, he was responsible for ensuring that company plants and personnel complied with applicable safety regulations through training, audits, and maintenance of the company safety manual.

**Military Experience**

United States Marine Corp (1980-1991)

**TAB 7**  
**PROJECT APPROACH**



## Tab 7 – Project Approach

### FM 812 Landfill

#### Work Plan for GCCS O&M, LMS O&M, LFG Migration Monitoring System, and Related Services

Presented To:



#### **CITY OF AUSTIN**

124 West 8<sup>th</sup> Street  
Room 308  
Austin, Texas 78701  
(512) 974-2500

Presented By:

#### **SCS FIELD SERVICES**

8107 Springdale Road  
Suite 108  
Austin, Texas 78724  
(512) 440-1888

June 5, 2018  
Proposal No. 070105218

Offices Nationwide  
[www.scsengineers.com](http://www.scsengineers.com)

## Tab 7 – Project Approach

### FM 812 Landfill

#### Work Plan for GCCS O&M, LMS O&M, LFG Migration Monitoring System, and Related Services

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 BFS Maintenance Log  
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 Pump Inspection Form  
 Probe/Structure Monitoring Report Example  
 Site-Specific Health and Safety Plan Example



## SECTION 1 INTRODUCTION

SCS Field Services (SCS-FS) will provide gas collection and control system (GCCS) operation and maintenance (O&M), leachate management system (LMS) O&M, and landfill gas (LFG) migration monitoring system services at the FM 812 Landfill (Site) in accordance with this work plan (Plan). This Plan provides details regarding the work programs for completing the required services. Since the work will be repetitive in nature, the descriptions given will apply to the specific services each time they are performed. These descriptions are provided by task below. Task numbers are followed by the Scope of Work section/subsection number and the Price Sheet line item number (as applicable) to which they apply.

## SECTION 2 WORK PROGRAM FOR SERVICES

### 2.1 SCHEDULING OF SERVICES

The SCS-FS project manager will notify the City of Austin (COA) Contract Manager by the first of each month of the schedule for providing all O&M services for that month. If requested at that time by the Contract Manager, SCS-FS will adjust the schedule as necessary. To the extent possible, scheduling of services will conform to the following criteria:

- GCCS O&M Services – Monthly services will occur by the 15<sup>th</sup> of the month at about the same time each month. Wellhead tuning will typically be performed in one day or, if that is not possible, on consecutive days. If follow-up monitoring is necessary, then it will be scheduled following the performance of initial services.
- LMS O&M Services – Monthly services will occur in conjunction with GCCS O&M services. Semiannual inspection services will be scheduled to occur within the first three months of each semiannual period (i.e., January through June and July through December). The second service event of each year will occur approximately six months after the first event. All services will be conducted in one day or, if that is not possible, on consecutive days.
- Additional GCCS/LMS Services – Quarterly meetings (if required) will occur in the first month of each quarter. Annual GHG reporting services will be provided in the first quarter of each year. Required forms will be prepared and submitted to the COA for review and approval by March 1. After finalizing, forms will be submitted to the U.S. EPA in advance of the March 31 deadline.
- LFG Migration Monitoring Services – Quarterly services will occur within the first two months of each quarter.
- Non-Routine Services – These services will be scheduled as needed.

The above services will occur intermittently throughout the year. Some services may be conducted concurrently or on consecutive days. Microsoft Outlook will be used to track and schedule tasks to ensure their timely completion.

## 2.2 TASK 1 – ROUTINE MONTHLY GCCS O&M SERVICES (SECTION 3.1 / LINE ITEM NO. 1)

Upon arrival at the Site, the SCS-FS technician will visit the Site Office and check in with the Contract Manager. If the Contract Manager is not available, then he will check in with other designated personnel or attempt to contact the Contract Manager by phone. After contact, the technician will proceed to the blower/flare station (BFS) to commence O&M services.

### LFG MONITORING INSTRUMENT CALIBRATION

Due to the importance of properly functioning equipment, the SCS-FS technician will field calibrate the LFG monitoring instrument (i.e., Landtec GEM 5000 or equivalent) prior to taking any readings. Upon arrival at the BFS, the technician will turn on the instrument and verify that it is functioning properly; that the time and date are correct; and that the hoses and fittings are in satisfactory condition. The monitoring instrument will be field calibrated in accordance with the manufacturer's specifications. Calibration will occur outside under the same conditions in which the equipment will be used. Calibration gases to be used for field calibration will be as follows:

- BFS/wellfield monitoring
  - Span: 50% methane / 35% carbon dioxide
  - Zero: 4% oxygen
- Gas probe/structure monitoring
  - Span: 15% methane / 15% carbon dioxide
  - Zero: ambient air

Even though the instrument “saves” the calibration record, the SCS-FS technician will take calibration readings using the appropriate calibration gases and store these readings under a site-specific calibration reading ID to further document that the equipment is properly calibrated. During the course of monitoring, the equipment will be recalibrated if there are extreme changes in weather conditions (especially temperature); if questionable readings are obtained; or if the readings will not stabilize. The technician will also verify at this time that previously created IDs for monitoring locations at the Site are stored in the instrument.

### BFS O&M SERVICES

Prior to commencement of O&M services, the SCS-FS technician will confirm that the blower and flare are operational and observe the BFS compound for unusual conditions that might warrant immediate attention (e.g., open panels, broken/missing sampling ports, etc.). After confirming that all systems are in satisfactory condition or after implementing necessary corrective actions, the technician will proceed with the following routine services typically in the order listed:

1. Monitor LFG at inlet/outlet of knockout and blower.
2. Monitor LFG at flame arrestor inlet/outlet.
3. Record flow rate/totalizer readings and download data logger.



4. Take pitot tube measurements to confirm flow rate (before or after wellfield tuning).
5. Open valve to drain condensate from flare base to knockout, then reclose.
6. Check the liquid level in the condensate sump.
7. Perform routine maintenance services pertaining to the blower, flare, air compressor, etc.:
  - a. Greasing blower motor (monthly).
  - b. Changing blower motor grease (semiannually).
  - c. Greasing air compressor motors (per manufacturer's requirements).
  - d. Changing air compressor oil (per manufacturer's requirements).
  - e. Checking and adjusting air compressor belts (per manufacturer's requirements).

In the course of providing these services, the technician will complete a BFS checklist (see appendix). In addition, a maintenance log for additional services will be used to identify other routine work needing to be performed (see appendix).

Upon completion of initial BFS O&M services, the technician will review the data for anomalies that might indicate a problem (e.g., high oxygen concentration indicating leak). When all services are complete, the technician will proceed with wellfield monitoring. Upon completion of wellfield monitoring, the technician will remonitor the BFS to determine the effect of wellfield tuning on LFG quality and flow rate.

## WELLFIELD O&M SERVICES

SCS-FS will provide monitoring services for the following features at the Site:

- 60 LFG extraction wells;
- 11 vacuum curtain wells;
- 3 leachate collection riser wells;
- 8 passive vents; and
- 3 gas trench vents.

While the specific order of monitoring of the LFG extraction wells is not critical, the SCS-FS technician will perform monitoring in the same general order from event to event. No valve adjustments at a well will be made prior to monitoring. Each well will be read with the following operational goals in mind:

Wellhead Parameter	Operating Limit/Range
Methane Concentration	> 40% with preferred range of 45% – 58%
Oxygen Concentration	< 5%
Well Pressure	< 0 inches w.c. (i.e., under vacuum)
Temperature	< 131° F

With regard to monitoring procedures, the general steps below will be followed for each well monitored typically in the order given.

1. Inspect well for deficiencies (e.g., damaged sampling ports, cracked flex hose, etc.) that might require documentation and corrective action prior to monitoring.

2. If there are no issues or after issues are corrected, select appropriate ID for the well in the monitoring instrument and allow instrument to purge.
3. Remove caps from sampling ports and connect hoses and temperature probe to appropriate ports and proceed with monitoring and tuning of well.
4. If a valve adjustment is made or unusual conditions are noted, indicate this in comments (e.g., Increased Flow/Vacuum; Decreased Flow/Vacuum; Surging) and save reading.
5. In the event of a valve adjustment, read the well a second time and save reading.
6. Upon completion of monitoring, disconnect all hoses and the temperature probe and place caps back on ports.

To the extent possible, adjustments to individual wells will be minimized to prevent excessive changes in pressure that might impact the entire wellfield. With regard to the vents, only monitoring for LFG quality will be performed since they are not connected to the collection system and are not equipped with wellheads for making adjustments.

In conjunction with wellfield monitoring, the technician will also perform the following services:

- Confirm operation of pneumatic pumps in select wells.
- Verify integrity and proper operation of condensate sumps including measuring and recording depths to liquid.
- Observe cover system and surface drainage conditions.

Any deficiencies will be documented and noted in the monthly O&M report. Those deficiencies that cannot be addressed by the technician at the time of monitoring and that warrant additional corrective action (e.g., condensate sump pump problems, cover integrity issues) will be brought to the attention of the Contract Manager. If available, the technician will meet with the Contract Manager prior to leaving the Site to discuss any deficiencies.

## GCCS O&M RECORDKEEPING AND REPORTING

Upon completion of GCCS O&M services and while still onsite, the technician will download data from the monitoring instrument to a laptop computer. This data will then be uploaded to the SCSeTools data management system via an Internet connection. (SCSeTools is a web-based application platform for collection and management of monitoring data.) After uploading, SCSeTools will produce a report of any locations that were not monitored during the event. This will give the technician the opportunity to read any “missed” locations prior to leaving the site.

Within 48 hours of the data being uploaded, the SCS-FS project manager will perform a quality review of the data and note and address any issues. Once the data is acceptable, it will be

approved by the SCS-FS project manager. The approved data will then be available to the Contract Manager and his/her designated representative for reviewing and downloading via the Internet.

Using the information obtained by the SCS-FS technician, the SCS-FS project manager will prepare the monthly O&M report after all services for a given month have been completed. The report will include the following sections in the order indicated:

- Background
- Operational Goals
- Summary of Wellfield Monitoring Results
- Summary of BFS Monitoring Results
- Non-Routine Services Performed
- Non-Routine Services Recommended
- Wellfield Monitoring Summary
- BFS Checklist

The report will be transmitted by email to the Contract Manager by the 10<sup>th</sup> of the month following the month when services were provided. A hard copy of the report will then be mailed to the Site for the operating record. A copy of a typical monthly GCCS O&M report for the Site is provided in the appendix.

## 2.3 TASK 2 – ROUTINE MONTHLY LEACHATE LEVEL MONITORING (SUBSECTION 3.1.9 / LINE ITEM NO. 12)

In conjunction with performing monthly GCCS O&M services, the SCS-FS technician will measure the depth to liquid in each of the three leachate collection risers at the Site. These risers extend from the base of the landfill sideslope into the waste to sumps under the waste where leachate accumulates for removal. These measurements will verify that pumping systems to remove the leachate are working properly. The procedures for monitoring will be as follows:

1. Remove the cover on the end of the riser.
2. Extend a water level indicator down riser until the liquid surface is contacted.
3. Record the depth to water as measured from the monitoring point on the riser.
4. Reinstall cover on end of riser.
5. Input measurement into spreadsheet with site-specific data regarding riser elevations and slope and calculate head on liner (see form in appendix).
6. Notify Contract Manager if calculated head on liner exceeds one foot.



7. Provide copy of completed table to Contract Manager in conjunction with transmittal of monthly GCCS O&M report.

If requested, the technician will assist with dewatering the leachate collection risers by manually operating the pumps. A copy of a table for documenting leachate level measurements for the Site is provided in the appendix.

## 2.4 TASK 3 – ROUTINE SEMINANNUAL PUMP O&M SERVICES (SECTION 3.3 / LINE ITEM NO. 2)

Pump inspection services will be performed semiannually by the SCS-FS technician. This will include inspection of each of the 35 pneumatic and electric pumps which are part of the GCCS and LMS at the Site. During each event, the procedures below will be followed to provide the required services:

1. For the leachate storage tanks, perform the following services:
  - a. Inspect tank integrity and associated containment system.
  - b. Check condition of site glass tubing.
  - c. Confirm operation of high level alarms by manually triggering alarm.
  - d. Document tank, containment, site glass, and alarm deficiencies.
2. For leachate well electric pumps, perform the following services:
  - a. Inspect control panel integrity and components.
  - b. Document panel readout for liquid level.
  - c. Manually operate pump and inspect discharge piping for leaks.
  - d. Inspect flow meter and record reading.
  - e. Document panel, pump, pipe, and meter deficiencies.
3. For LFG extraction well and condensate pumps, perform the following services:
  - a. Cycle pump by shutting off and then turning back on air to pump.
  - b. Inspect discharge and air hoses and fittings for leaks.
  - c. Document pump, hose, and fitting deficiencies.

Deficiencies which cannot be corrected in the course of the inspection will be brought to the attention of the Contract Manager at the time of the inspection. Inspection results will be submitted to the Contract Manager in conjunction with transmittal of the monthly GCCS O&M report. A copy of a form for documenting pump inspections for the Site is provided in the appendix



## 2.5 TASK 4 – QUARTERLY GCCS/LMS O&M MEETING (SECTION 3.6 / LINE ITEM NO. 3)

Meetings to discuss issues related to the O&M of the GCCS and LMS will be held as requested by the Contract Manager. When meetings are requested, the SCS-FS project manager will prepare a meeting agenda prior to the meeting based on his discussion with the Contract Manager. The meeting will be held at the Site and will be attended by the Contract Manager, the SCS-FS project manager, the SCS-FS technician, and possibly other COA personnel. Following the meeting, the SCS-FS project manager will prepare and distribute meeting minutes to all those in attendance at the meeting.

## 2.6 TASK 5 – MANDATORY GHG REPORTING SUPPORT SERVICES (SECTION 3.4 / LINE ITEM NO. 1)

Mandatory GHG reporting support services for the Site will be completed through the SCS Engineers division. These services will be provided annually in accordance with the Federal Mandatory GHG Reporting Rule (40 CFR §98) which require the preparation and submittal of GHG emissions estimates and associated information. SCS-FS will generate most of the information needed for preparing estimates throughout the year in the course of providing routine services; however, any additional information will be identified and provided after January 1.

Estimates will then be prepared, and the XML forms completed and submitted to the COA for review no later than March 1. Upon receiving comments, SCS-FS will finalize the calculation and, with COA approval, submit them directly to the U.S. EPA by the anticipated reporting deadline of March 31. After completing the report, SCS-FS will provide a memorandum to the COA for their files, signed and sealed by a professional engineer licensed in the State of Texas, which includes backup calculation spreadsheets and pertinent assumptions.

## 2.7 TASK 6 – QUARTERLY LFG PROBE MONITORING (SECTION 3.2 / LINE ITEM NO. 13)

Monitoring of 38 probes, groundwater monitoring wells, piezometers, and structures will be done in accordance with the site-specific Landfill Gas Management Plan and the requirements of 30 TAC §330.371. With regard to structures and probes, monitoring procedures as described below will be followed. Prior to any monitoring, the monitoring instrument will be field calibrated as specified in Section 2.2 of this work plan.

### STRUCTURE MONITORING

Onsite structures will be monitored in general accordance with the following procedures:

1. Using an ID specific to the structure, start the instrument pump and hold the sampling tube about 6 inches from the floor.

2. Monitor along each wall of the structure.
3. Monitor any penetrations of floor.
4. Observe instrument readings throughout monitoring of structure, then save the reading.
5. If methane is detected at any concentration, note the location in a logbook and notify the Contract Manager immediately.
6. For exceedances of the regulatory limit for methane (i.e., 1.25% by volume in air), recalibrate the instrument and remonitor the structure.

Unless access is not available, structures will typically be monitored before probe, wells, and piezometers.

## PROBE MONITORING

Probes will be monitored in general accordance with the procedures indicated below. The procedures are similar for groundwater monitoring wells, piezometers, and vents except that these features do not have labcock fittings like the probes.

1. Unlock the probe and inspect for deficiencies (e.g., missing lock, damaged casing or pad, damaged labcock, etc.) that might require documentation and corrective action before or after monitoring.
2. If there are no issues impacting monitoring or after issues are corrected, select appropriate ID for the probe in the monitoring instrument and allow instrument to purge.
3. After zeroing pressure transducer, attach hose to labcock and open the valve to obtain relative pressure.
4. Measure the gas quality in the probe by running the monitoring instrument pump for a minimum of one minute or until the reading stabilizes, then save the reading.
5. After reading the gas quality, remove the hose from the labcock and close the valve.
6. Remove the riser cap and take a depth to water measurement using a water level indicator and record it.
7. For wells and piezometers, decontaminate the water level meter after each use.
8. If methane is detected at any concentration, then notify the Contract Manager immediately.
9. For exceedances of the regulatory limit (i.e., 5.0% by volume in air), recalibrate the instrument and remonitor the probe.



10. Upon completing monitoring, close the casing lid and relock it.

The order of probe monitoring is not critical; however, in practice, monitoring in a clockwise direction beginning from the front of the Site has been found to be the most efficient.

## LFG PROBE/WELL/PIEZOMETER AND STRUCTURE MONITORING RECORDKEEPING AND REPORTING

Upon completion of probe, well, piezometer, and structure monitoring services and while still onsite, the technician will download data from the monitoring instrument to a laptop computer. This data will then be uploaded to SCS Tools via an Internet connection. After uploading, SCS Tools will produce a report of any locations that were not monitored during the event. This will give the technician the opportunity to read any “missed” locations prior to leaving the site. As noted above, if exceedances were detected in the course of monitoring, these will be immediately brought to the attention of the Contract Manager.

Within 48 hours of the data being uploaded, the SCS-FS project manager will perform a quality review of the data and note and address any issues. When acceptable, the project manager will approve the data. The approved data will then be available to the Contract Manager and his/her designated representative for reviewing and downloading via the Internet.

Using the information obtained by the SCS-FS technician, the SCS-FS project manager will prepare the quarterly monitoring report. The report will include a summary of monitoring results along with the monitoring data. The report will be transmitted by email to the Contract Manager by the 10<sup>th</sup> of the month following the month when services were provided except in the event of an exceedance in which case it will be transmitted within 48 hours. A hard copy of the report will then be mailed to the Site for the operating record. A copy of a typical quarterly probe/structure monitoring report for the Site is provided in the appendix.

## 2.8 TASK 7 – NON-ROUTINE SERVICES

For work activities not covered under routine services, non-routine services will be provided. Due to the variety of these services, it is not possible to provide a detailed workplan describing all such services. The following non-routine services are described in the Scope of Work and are accounted for as separate line items on the Price Sheet:

- Remonitoring of GCCS extraction wells (Subsection 3.5.A / Line Item No. 4));
- Remonitoring of BFS (Subsection 3.5.B / Line Item No. 5);
- Repair of broken valve (Subsection 3.5.C / Line Item No. 6);
- Replacement of torn flex hose (Subsection 3.5.D / Line Item No. 7);
- Repair to main header line (Subsection 3.5.E / Line Item No. 8);
- Trouble shooting methane migration issues (Subsection 3.5.F / Line Item No. 9);
- Gas flow meter calibration (Subsection 3.5.G / Line Item No. 10); and
- Replacement of site glass tubing (Subsection 3.5.I / Line Item No. 11).

These non-routine services will be performed on an as-needed basis. Assumptions and conditions concerning these non-routine services are provided with the Price List.

Examples of other non-routine services which might be required include:

- Repair or replacement of system components (not described in the Scope of Work);
- Installation of new system components;
- Required monitoring with specialized equipment (e.g., gas chromatograph);
- Landfill gas-to-energy system engineering assistance; and
- Methane migration assistance.

The approach to addressing these types of non-routine services will vary from event to event depending on the location, weather conditions, and other factors. As such, they will be dealt with on a case-by-case basis. Such services are covered under Line Item Nos. 9 through 14 of the Price Sheet. Assumptions and conditions concerning these non-routine services are also provided with the Price List.

### **SECTION 3 HEALTH AND SAFETY PLAN**

All services at the Site will be covered by a site-specific health and safety plan (SSHSP) prepared by SCS-FS. The current SSHSP, a copy of which is provided in the appendix, will be reviewed and updated as needed. This SSHSP provides basic emergency response safety information. In addition to this, however, SCS-FS has developed General Standard Operating Procedures and Job Task Safety Analyses that provide more detailed safety requirements specific to the types of work performed at the Site. For brevity, these items have not been included with the copy of the SSHSP. The complete SSHSP will be carried by SCS-FS technician(s) providing services at the Site and made available to COA personnel for review upon request.

### **SECTION 4 COMPLIANCE WITH RULES AND REGULATIONS**

SCS-FS commits to complying with all applicable rules and regulations of Federal, State, and Local governing entities pertaining to the Site and with the terms of this Request for Proposal (RFP).

## **APPENDIX**

## BFS CHECKLIST



**COA FM-812 Landfill  
Blower/Flare Station Report  
Routine Operations Checklist**

Date:   
Name(s):

Start Time:   
End Time:

**Weather Conditions**

Temperature (°F):   
Wind Direction/Speed (mph):

Barometric Pressure (in. Hg):   
Status:

**BLOWER/FLARE STATION**

Monitoring Point	Time (24-hour clock)	Gas Composition (%)				Pres/Vac ("H <sub>2</sub> O)	Temp. (°F)
		CH <sub>4</sub>	CO <sub>2</sub>	O <sub>2</sub>	Balance Gas		

**Pre-Tuning**

Blower Inlet	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Flare Inlet	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Flare Temperature (°F)	<input type="text"/>	Flow (SCFM)	<input type="text"/>	Totalizer (SCF)	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Post-Tuning**

Blower Inlet	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Flare Inlet	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Flare Temperature (°F)	<input type="text"/>	Flow (SCFM)	<input type="text"/>	Totalizer (SCF)	<input type="text"/>	<input type="text"/>	<input type="text"/>

Blower Data	Operating?	TIC 1 (°F)	TIC 2 (°F)	Hours	Amps	Lube?
Blower 1:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**CONDENSATE COLLECTION SYSTEM**

Condensate Sump ID	Time Monitored (24-hour clock)	(A) Elevation at Monitoring Point (ft MSL)	(B) Depth to Condensate (ft)	(C) Condensate Elevation (ft MSL) [(A) - (B)]	(D) Pump on Elevation (ft MSL)	(E) Pump off Elevation (ft MSL)	(F) Status [(D)>(C)>(E)]
1	<input type="text"/>	527.91	<input type="text"/>	<input type="text"/>	520.67	518.43	<input type="text"/>
2	<input type="text"/>	538.81	<input type="text"/>	<input type="text"/>	516.10	515.00	<input type="text"/>
3	<input type="text"/>	560.84	<input type="text"/>	<input type="text"/>	544.50	543.39	<input type="text"/>
4	<input type="text"/>	523.31	<input type="text"/>	<input type="text"/>	515.30	508.81	<input type="text"/>

**Storage Tank Fluid Level (ft)**

Tank A	<input type="text"/>
Tank B	<input type="text"/>

**GENERAL MAINTENANCE**

Item	Yes/No
Inspected Valve?	<input type="text"/>
Checked Start-Up Sequence?	<input type="text"/>
Cleaned Flame Arrestor?	<input type="text"/>
Pressures Inlet/Outlet ("H <sub>2</sub> O)	<input type="text"/>

**COMMENTS**

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## PITOT TUBE FLOW RATE CALCULATIONS FORM

**COA FM-812 Landfill**  
**Flow Rate Calculations**  
**[DATE]**

Fill in Yellow Fields

	Event (X)
Pre-tune	
Post-tune	
<b>FIELD DATA</b>	
PIPE I.D. (X-INCH SDR XX HDPE) (IN) =	12.350
GAS TEMP (DEG. F) =	
GAS PRES. ("W.C.)=	
%CH4 =	
% O2=	
AVERAGE PITOT TUBE DIFF. PRES ("W.C.)=	

<b>CALCULATED DATA</b>	
AREA OF PIPE (FT2) =	0.832
ACTUAL GAS STATIC PRES. (PSIA) =	14.696
%H2O IN THE GAS =	0.148
AVG. MOL. WT. OF THE GAS =	27.985
GAS VISCOSITY (LB/(FT*MIN))=	0.00037
GAS DENSITY (LBM/FT3)=	0.083

<b>LFG FLOW RATE DATA</b>	
ACTUAL LANDFILL GAS VELOCITY (FT/MIN)=	
ACTUAL LANDFILL GAS FLOW RATE (CFM)=	
LANDFILL GAS CORRECTED FLOW RATE (SCFM)=	

<b>BTU DATA</b>	
LANDFILL GAS CORRECTED FLOW RATE (SCFM)=	
Gas Composition (% Methane)	
<b>BTU Production (BTU/MIN)</b>	
<b>BTU Production (BTU/HR)</b>	
<b>BTU Production (mmBTU/DAY)</b>	

**BFS MAINTENANCE LOG**

**COA FM-812 Landfill**  
**Blower / Flare Station Maintenance Schedule Log**

Maintenance Item	Monthly	Quarterly	Annually	Date	Initials	Documentation and Comments (Quarterly and Annual Items Only)		
<b>Flare Stack</b>								
Record temperature	X							
Drain condensate trap	X							
<b>Flame Arrestor</b>								
Record differential pressure	X							
Check tightness of bolts		X						
Pull sheets and clean			X					
<b>Pilot Assembly</b>								
Check for loose wires			X					
Check ignition rod			X					
Check flame detector			X					
Check spark plug insulator			X					
<b>Thermocouple Assemblies</b>								
Visual inspection		X						
<b>Propane Tank</b>								
Record tank level (% full)	X							
Record line pressure	X							
Check pilot gas solenoid operation	X							
<b>Flare Station</b>								
Inspect all flanges and connections	X							
<b>LFG Blower</b>								
Confirm blower operation	X							
Check bearing temperature	X							
Record static pressure (inlet)	X							
Record static pressure (outlet)	X							
Record flow rate (flare)	X							
Lubricate blower bearings	X							
Record motor voltage		X				L1/L2:	L1/L3:	L2/L3:
Record motor amperage		X				L1:	L2:	L3:
Check tightness of bolts		X						
Change blower bearing grease		X				Minimum semiannually		
Inspect foundation			X					
Inspect isolation pads			X					
Inspect pipe supports			X					



**COA FM-812 Landfill  
Blower / Flare Station Maintenance Schedule Log**

Maintenance Item	Monthly	Quarterly	Annually	Date	Initials	Documentation and Comments (Quarterly and Annual Items Only)
<b>Knock Out Pot</b>						
Record differential pressure	X					
Clean demister pads (as necessary)		X				
Visual inspection of exterior		X				
<b>Mass Flow Meter</b>						
Pull, inspect, and clean probe		X				
Calibrate (by third party)			X			
<b>Safety Shutdown Devices</b>						
Test and verify		X				
Check actuator valve pressure		X				
<b>Chart Recorder</b>						
Confirm data recorder operation	X					
Check time and date		X				
<b>Station Compound</b>						
Inspect all electrical enclosures		X				
Remove weeds and debris		X				
<b>Air Compressor</b>						
Test relief valves	X					
Check oil level	X					
Check belt tension	X					
Check for air leaks	X					
Record tank pressure	X					
Clean intercooler and aftercooler		X				
Change compressor oil/filter		X				
Lubricate motor bearings		X				
Check crankcase for sludge			X			
Check pressure switch diaphragm			X			
Check motor/starter contacts			X			
<b>Notes</b>						

## GCCS O&M REPORT EXAMPLE



## COA FM-812 Landfill

### GCCS OM&M Summary Report For December 2017

Presented to:

**City of Austin**



P.O. Box 1088  
Austin, Texas 78767  
(512) 243-3325

Presented by:

**SCS FIELD SERVICES**

6006 East Ben White Blvd.  
Suite 200  
Austin, Texas 78741  
(512) 440-1888

January 2018  
File No. 07206081.00

**Offices Nationwide**  
[www.scsengineers.com](http://www.scsengineers.com)

## COA FM-812 Landfill GCCS OM&M Summary Report For December 2017

### ROUTINE GAS COLLECTION AND CONTROL SYSTEM (GCCS) OPERATIONS, MONITORING, AND MAINTENANCE (OM&M) SERVICES

Routine GCCS OM&M services for the City of Austin (COA) FM-812 Landfill (Site) were provided by SCS Field Services (SCS-FS) as indicated below for December 2017.

#### Background

The Site's GCCS consists of 60 landfill gas (LFG) extraction wells, below-grade high-density polyethylene (HDPE) header and lateral piping, and four condensate collection locations all served by a blower/flare station (BFS) system. Three leachate collection risers are also connected to the collection system. Collected LFG is combusted through a modified candlestick flare. The collection system provides coverage of about 100 acres of the landfill footprint. A vacuum curtain well system consisting of 11 wells is also installed at the Site but is served by a separate blower connected to a charcoal canister filter.

#### Operational Goals for Wellfield Monitoring

The GCCS is not currently subject to New Source Performance Standards (NSPS) operational requirements; however, the operating limits in those requirements provide reasonable operational goals for individual wells. Consequently, on the attached wellfield monitoring summary table, shading of parameter readings has been used to highlight exceedances of NSPS limits (i.e., pressure must be less than 0.0 inches of water column [in. w.c.]; temperature must be less than 131° F; and oxygen concentration must be less than 5.0 percent [%] by volume). Also, although not required by NSPS, additional goals for methane concentration (should be greater than 45% but less than 58%) were applied to well monitoring results. This is a desirable range for methane concentration to ensure that LFG quality of individual wells is neither too "poor" nor too "rich." Therefore, readings within this range are also highlighted in the summary table. Finally, the IDs for wells exhibiting exceedances of one or more of the NSPS limits at the last reading for the month (i.e., on December 21) are highlighted.

#### Summary of Wellfield Monitoring Results

Routine wellfield monitoring services were provided at the Site on December 21. All 60 LFG extraction wells were monitored on that date and adjusted as needed. The following observations are made concerning monitoring results for the month for the LFG extraction wells:

- Overall LFG quality for the wellfield was poor. Only 17 of the 60 LFG extraction wells monitored (about 28%) exhibited methane concentrations within the desired range (i.e., between 45% and 58%). The average methane concentration for all well readings taken was 36.0%. For oxygen, 44 of the 60 wells monitored (about 73%) exhibited concentrations less than 5.0%. The average oxygen concentration for all well readings taken was 3.6%.
- Upon completion of monitoring, 32 wells exceeded the operational goals for pressure (must be <0.0 in. w.c.) and/or oxygen concentration (must be <5%). No wells exceeded the operational goal for temperature (must be <131° F). During the prior month, 26 wells exceeded the operational goals for pressure and/or oxygen concentration upon completion of monitoring.
- By the conclusion of monthly monitoring, there were 12 temporarily decommissioned wells (i.e., wells whose valves were fully closed). These wells were decommissioned during December or prior months to improve LFG quality at the flare by eliminating flow from wells exhibiting poor LFG quality. For the prior month, there were 13 decommissioned wells at the conclusion of monitoring.

### Summary of Blower/Flare Station Monitoring Results

The following observations are made concerning monitoring results at the blower/flare station (BFS) for the December 21 event:

- LFG quality as measured at the flare inlet improved over the course of the monitoring event. The pre-tuning and post-tuning methane concentrations were 24.5% and 40.0%, respectively. The pre-tuning and post-tuning oxygen concentrations were 8.4% and 0.6%, respectively. For comparison, the methane and oxygen concentrations at the conclusion of the prior month's monitoring on November 30 were 32.8% and 3.6%, respectively.
- Flow rates at the flare decreased over the course of the monitoring event. The pre-tuning and post-tuning flow rates were 733 standard cubic feet per minute (scfm) and 532 scfm, respectively. For comparison, the flow rate at the conclusion of the prior month's monitoring on November 30 was 510 scfm.
- Temperatures at the flare increased over the course of the monitoring event. The pre-tuning and post-tuning temperatures were 722° F and 761° F, respectively. For comparison, the flare temperature at the conclusion of the prior month's monitoring on November 30 was 723° F.
- Available vacuum to the wellfield as measured at the blower inlet increased over the course of the monitoring event. The pre-tuning and post-tuning available vacuums were 25.9 in. w.c. and 33.6 in. w.c., respectively. This available vacuum at the blower inlet



provided sufficient vacuum to all portions of the wellfield, except well EW-79R. For comparison, the available vacuum at the conclusion of the prior month's monitoring on November 30 was 35.3 in. w.c.

A BFS checklist documenting monitoring information is attached.

### **Summary of Pitot Tube Measurements**

Pitot tube measurements for the month were taken with a Landtec GEM 5000 on December 21. Based on these measurements (excluding one exceptionally low flow reading), the average calculated flow rate was about 596 scfm compared to a flow rate of about 547 scfm as measured by the flow meter. This indicates a drift for the flow meter of about 8.2%, which is outside the desired range of  $\pm 5\%$ . Pitot tube measurement results are shown on the wellfield monitoring summary.

### **NON-ROUTINE SERVICES PERFORMED**

SCS-FS performed the following non-routine services related to the GCCS in response to field observations and/or client instructions during December.

- A broken flex hose on well EW-24R was replaced.

### **NON-ROUTINE SERVICES RECOMMENDED**

SCS-FS has the following non-routine OM&M services related to the GCCS to recommend at this time.

- The lateral pipe to well EW-79R should be replaced or excavated and releveled to restore vacuum to the well.

## WELLFIELD MONITORING RESULTS

**COA FM-812 Landfill  
Wellfield Monitoring Summary  
for December 2017**

Sampling Location ID	Date	Time (24-hour clock)	CH <sub>4</sub> (% by vol)	CO <sub>2</sub> (% by vol)	O <sub>2</sub> (% by vol)	Balance Gas (% by vol)	Temp (° F)	Flow (scfm)	Initial Static Pressure (In. H <sub>2</sub> O)	Adjusted Static Pressure (In. H <sub>2</sub> O)	System Pressure (In. H <sub>2</sub> O)	Comment
<b>Calibration</b>												
Calibration	12/21/2017	11:12	0.0	0.0	20.8	79.2	NA	NA	NA	NA	NA	
Calibration	12/21/2017	11:14	50.3	35.0	0.0	14.7	NA	NA	NA	NA	NA	
<b>Blower / Flare</b>												
Blower Inlet	12/21/2017	11:17	24.5	19.2	8.5	47.8	76	733	-25.9	NA	NA	
Blower Inlet	12/21/2017	14:52	40.0	32.6	0.7	26.7	80	547	-33.6	NA	NA	
Blower Outlet	12/21/2017	11:19	24.5	19.4	8.4	47.7	73	733	3.3	NA	NA	
Blower Outlet	12/21/2017	14:50	40.0	32.8	0.6	26.6	100	547	2.9	NA	NA	
<b>Pitot Tube</b>												
F812PIT3	12/21/2017	14:46	39.9	32.9	0.7	26.5	100	224	3.0	NA	NA	
F812PIT6	12/21/2017	14:47	39.8	32.5	0.8	26.9	100	548	3.0	NA	NA	
F812PIT9	12/21/2017	14:49	40.2	32.5	0.6	26.7	100	645	3.0	NA	NA	
<b>Extraction Wells</b>												
EW-01	12/21/2017	11:30	78.5	21.4	0.0	0.1	76	NA	0.6	0.3	-25.5	Increased Flow/Vacuum
EW-02 <sup>1</sup>	12/21/2017	11:32	24.9	13.7	5.3	56.1	74	NA	0.3	0.3	-25.8	No Change; Fully Closed
EW-03	12/21/2017	11:37	51.4	37.0	0.0	11.6	80	NA	0.1	-0.6	-25.6	Increased Flow/Vacuum
EW-04 <sup>1</sup>	12/21/2017	11:42	2.2	8.0	16.0	73.8	74	NA	0.4	0.4	-25.0	No Change; Fully Closed
EW-05	12/21/2017	11:48	21.8	30.1	0.0	48.1	79	4	0.4	0.5	-13.4	No Change
EW-06	12/21/2017	12:01	56.4	35.5	0.0	8.1	79	6	-22.0	-22.0	-24.6	No Change
EW-07	12/21/2017	11:56	62.5	35.7	0.0	1.8	88	13	-9.2	-9.4	-13.7	No Change
EW-08	12/21/2017	11:51	40.6	37.6	0.0	21.8	88	2	0.4	0.4	-14.5	No Change
EW-09 <sup>1</sup>	12/21/2017	12:20	32.5	30.2	0.0	37.3	76	NA	0.8	0.8	-24.6	No Change; Fully Closed
EW-10	12/21/2017	12:28	47.7	35.4	0.0	16.9	73	16	-2.8	-2.9	-19.0	No Change
EW-11	12/21/2017	12:34	13.4	11.5	14.9	60.2	77	4	-8.8	-4.4	-13.2	Decreased Flow/Vacuum
EW-12	12/21/2017	12:54	47.9	35.2	0.0	16.9	80	11	-2.5	-2.4	-16.2	No Change
EW-13	12/21/2017	12:43	63.8	36.1	0.0	0.1	77	2	-11.8	-11.8	-14.4	No Change
EW-14 <sup>1</sup>	12/21/2017	12:37	1.3	9.3	8.2	81.2	78	NA	0.8	0.8	-13.5	No Change; Fully Closed
EW-17	12/21/2017	13:34	60.8	29.3	1.8	8.1	77	0	-0.8	-1.0	-32.7	No Change
EW-18	12/21/2017	14:24	45.6	31.0	0.0	23.4	80	27	-15.8	-15.8	-28.0	No Change
EW-19 <sup>1</sup>	12/21/2017	13:38	0.5	9.2	17.3	73.0	74	NA	-4.7	-3.1	-32.3	No Change; Fully Closed
EW-20	12/21/2017	13:46	50.8	33.4	0.0	15.8	74	7	-23.6	-23.6	-25.3	No Change
EW-21 <sup>1</sup>	12/21/2017	13:32	1.4	1.3	17.9	79.4	78	NA	0.9	0.9	-32.6	No Change; Fully Closed
EW-22	12/21/2017	14:21	39.0	28.1	0.0	32.9	74	37	-2.1	-2.1	-31.6	No Change
EW-23	12/21/2017	13:49	29.7	29.5	0.3	40.5	81	5	-10.7	-10.8	-23.8	No Change
EW-24R	12/21/2017	13:27	0.7	2.2	19.0	78.1	70	NA	0.5	0.5	-31.9	No Change
EW-25	12/21/2017	14:15	69.7	29.2	0.0	1.1	73	3	-21.9	-22.0	-29.2	No Change

1 Decommissioned well

**COA FM-812 Landfill  
Wellfield Monitoring Summary  
for December 2017**

Sampling Location ID	Date	Time (24-hour clock)	CH <sub>4</sub> (% by vol)	CO <sub>2</sub> (% by vol)	O <sub>2</sub> (% by vol)	Balance Gas (% by vol)	Temp (° F)	Flow (scfm)	Initial Static Pressure (In. H <sub>2</sub> O)	Adjusted Static Pressure (In. H <sub>2</sub> O)	System Pressure (In. H <sub>2</sub> O)	Comment
EW-26	12/21/2017	14:00	24.5	29.2	0.0	46.3	75	1	-9.4	-9.6	-22.8	No Change
EW-27R	12/21/2017	13:07	0.7	3.4	18.6	77.3	80	NA	0.5	0.5	-19.5	No Change
EW-28	12/21/2017	14:12	37.3	31.2	0.0	31.5	83	21	-1.6	-1.6	-28.1	No Change
EW-29	12/21/2017	14:04	24.8	28.8	0.0	46.4	77	8	-2.5	-2.5	-10.3	No Change
EW-30R <sup>1</sup>	12/21/2017	13:04	0.9	7.5	17.2	74.4	79	NA	0.6	0.5	-18.9	No Change; Fully Closed
EW-31	12/21/2017	14:10	49.0	35.1	0.0	15.9	71	17	-15.8	-16.1	-29.9	No Change
EW-32	12/21/2017	13:02	30.0	21.2	10.1	38.7	70	NA	-1.9	-1.0	-9.8	Decreased Flow/Vacuum
EW-37	12/21/2017	11:27	54.1	35.9	0.0	10.0	77	0	0.0	0.0	-25.7	No Change
EW-40 <sup>1</sup>	12/21/2017	11:34	4.5	7.9	15.1	72.5	77	NA	0.0	0.0	-20.4	No Change; Fully Closed
EW-44	12/21/2017	11:39	54.7	35.9	0.0	9.4	76	5	-9.8	-9.8	-25.6	No Change
EW-46 <sup>1</sup>	12/21/2017	12:03	27.4	19.9	6.2	46.5	78	NA	0.2	0.3	-24.8	No Change; Fully Closed
EW-47	12/21/2017	11:45	51.5	37.4	0.0	11.1	82	4	0.1	0.1	-13.7	No Change
EW-49	12/21/2017	12:09	53.9	35.3	0.0	10.8	78	1	0.2	0.2	-24.8	No Change
EW-52	12/21/2017	11:59	57.0	35.2	0.0	7.8	78	NA	0.7	0.6	-24.7	Increased Flow/Vacuum
EW-54	12/21/2017	12:16	38.5	29.9	0.0	31.6	79	NA	0.8	0.8	-24.5	No Change
EW-57	12/21/2017	11:53	62.4	36.5	0.0	1.1	77	2	-9.7	-9.8	-13.9	No Change
EW-59	12/21/2017	12:18	49.6	35.6	0.0	14.8	70	10	-1.5	-1.5	-23.9	No Change
EW-63 <sup>1</sup>	12/21/2017	12:26	20.7	29.8	0.0	49.5	75	NA	0.7	0.7	-24.0	No Change; Fully Closed
EW-65	12/21/2017	12:59	50.4	33.7	0.0	15.9	80	NA	1.2	1.2	-23.0	Increased Flow/Vacuum
EW-68 <sup>1</sup>	12/21/2017	12:30	2.2	16.8	3.3	77.7	74	NA	0.6	0.7	-13.2	No Change; Fully Closed
EW-70	12/21/2017	12:57	59.7	36.7	0.0	3.6	81	NA	1.2	0.9	-24.4	Increased Flow/Vacuum
EW-73	12/21/2017	12:52	53.8	36.1	0.0	10.1	80	6	-3.0	-3.0	-12.8	No Change
EW-77	12/21/2017	12:40	55.6	31.1	3.0	10.3	75	NA	-13.2	-13.3	-13.8	No Change
EW-78	12/21/2017	12:45	38.7	32.2	0.0	29.1	74	5	0.4	0.5	-12.5	No Change
EW-79R	12/21/2017	12:48	35.7	33.0	0.0	31.3	80	NA	1.0	1.0	1.1	No Change
EW-90	12/21/2017	13:36	17.4	21.5	8.6	52.5	79	NA	0.9	0.9	-32.9	No Change
EW-91	12/21/2017	13:41	0.3	6.9	9.3	83.5	80	NA	0.7	0.7	-27.5	No Change
EW-103 <sup>1</sup>	12/21/2017	14:19	2.1	8.3	16.9	72.7	80	NA	0.4	0.4	-29.6	No Change; Fully Closed
EW-116	12/21/2017	14:07	40.8	33.8	0.0	25.4	82	NA	0.9	0.8	-10.2	Increased Flow/Vacuum
EW-121	12/21/2017	14:34	58.0	40.2	0.0	1.8	80	NA	-5.7	-5.8	-15.7	Increased Flow/Vacuum
EW-122	12/21/2017	14:32	37.1	33.6	0.0	29.3	72	6	-2.9	-2.9	-27.8	No Change
EW-123	12/21/2017	14:28	30.9	30.7	0.0	38.4	80	12	-4.5	-4.5	-27.8	No Change
EW-124	12/21/2017	14:30	39.9	33.0	0.0	27.1	80	4	-4.8	-4.9	-28.1	No Change
EW-125	12/21/2017	13:50	36.8	30.3	0.2	32.7	73	8	-14.1	-14.3	-25.4	No Change
EW-126	12/21/2017	13:53	43.1	31.7	2.3	22.9	70	NA	-13.6	-10.1	-22.9	Decreased Flow/Vacuum
EW-127	12/21/2017	13:56	29.7	24.6	6.7	39.0	77	NA	-10.1	-6.2	-23.4	Decreased Flow/Vacuum
EW-128	12/21/2017	13:58	44.8	32.2	0.0	23.0	64	2	-20.6	-21.2	-22.1	No Change
Well Reading Averages			36.0		3.6							

1 Decommissioned well

Prepared by SCS Field Services

Page 2 of 3

**COA FM-812 Landfill  
Wellfield Monitoring Summary  
for December 2017**

Sampling Location ID	Date	Time (24-hour clock)	CH <sub>4</sub> (% by vol)	CO <sub>2</sub> (% by vol)	O <sub>2</sub> (% by vol)	Balance Gas (% by vol)	Temp (° F)	Flow (scfm)	Initial Static Pressure (In. H <sub>2</sub> O)	Adjusted Static Pressure (In. H <sub>2</sub> O)	System Pressure (In. H <sub>2</sub> O)	Comment
<b>Leachate Collection Risers</b>												
LCR-01	12/21/2017	15:43	0.0	0.4	19.9	79.7	70	NA	0.8	0.8	-15.8	No Change
LCR-02	12/21/2017	15:27	1.6	5.4	18.4	74.6	70	19	3.1	2.5	-9.8	No Change
LCR-03	12/21/2017	15:06	0.5	5.7	18.4	75.4	70	NA	0.9	0.9	-12.0	No Change

	Indicates LFG extraction well reading within desired operating range of 45%<CH <sub>4</sub> <58%.
	Indicates LFG extraction well reading that does not conform with NSPS operational goals of pressure <0.0 inches, temperature <131°F, or O <sub>2</sub> < 5%.
	Indicates LFG extraction well with at least one reading that does not conform to NSPS operational goals at the end of the monitoring event.

1 Decommissioned well

Prepared by SCS Field Services

Page 3 of 3



## BLOWER/FLARE STATION REPORT

**COA FM-812 Landfill**  
**Blower/Flare Station Report**  
**Routine Operations Checklist**

**Date:** 12/21/2017  
**Name(s):** Joe Ortiz

**Start Time:** 11:00  
**End Time:** 16:00

**Weather Conditions**

**Temperature (°F):** 75  
**Wind Direction/Speed (mph):** S / 8

**Barometric Pressure (in. Hg):** 29.85  
**Status:** Falling

**BLOWER/FLARE STATION**

Monitoring Point	Time (24-hour clock)	Gas Composition (%)				Pres/Vac ("H <sub>2</sub> O)	Temp. (°F)
		CH <sub>4</sub>	CO <sub>2</sub>	O <sub>2</sub>	Balance Gas		

<b>Pre-Tuning</b>							
Blower Inlet	11:17	24.5	19.2	8.5	47.8	-25.9	76
Flare Inlet	11:19	24.5	19.4	8.4	47.7	3.3	96
Flare Temperature (°F)	722	Flow (SCFM)	733	Totalizer (SCF)		200202573	

<b>Post-Tuning</b>							
Blower Inlet	14:52	40.0	32.6	0.7	26.7	-33.6	80
Flare Inlet	14:50	40.0	32.8	0.6	26.6	2.9	100
Flare Temperature (°F)	761	Flow (SCFM)	532	Totalizer (SCF)		200340212	

Blower Data	Operating?	TIC 1 (°F)	TIC 2 (°F)	Hours	Amps	Lube?
Blower 1:	Yes	89	95	NA	13.8	Yes

**CONDENSATE COLLECTION SYSTEM**

Condensate Sump ID	Time Monitored (24-hour clock)	(A) Elevation at Monitoring Point (ft MSL)	(B) Depth to Condensate (ft)	(C) Condensate Elevation (ft MSL) [(A) - (B)]	(D) Pump on Elevation (ft MSL)	(E) Pump off Elevation (ft MSL)	(F) Status [(D)>(C)>(E)]
1	15:05	527.91	9.1	518.81	520.67	518.43	OK
2	15:00	538.81	23.3	515.51	516.10	515.00	OK
3	15:15	560.84	17.3	543.54	544.50	543.39	OK
4	15:10	523.31	13.4	509.91	515.30	508.81	OK

<b>Storage Tank Fluid Level (ft)</b>	
Tank A	3.0
Tank B	4.0

**GENERAL MAINTENANCE**

Item	Yes/No			
Inspected Valve?	Yes			
Checked Start-Up Sequence?	No			
Cleaned Flame Arrestor?	No	Pressures Inlet/Outlet ("H <sub>2</sub> O)	2.9	2.0

**COMMENTS**

Replaced broken flex hose on well EW-24R.

---

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LEACHATE RISER MONITORING TABLE

## COA FM-812 Landfill Leachate Head Level Monitoring Form

Leachate Sump Riser I.D.	Time Monitored (24-hour clock)	(A) Elevation at Monitoring Point (ft MSL) (1)	(B) Sloped Distance to Leachate From Top of Riser/Manhole (ft)	(C) Slope Factor (2)	(D) Vertical Distance to Leachate From Monitoring Point (ft) [(B) x (C)]	(E) Leachate Head Level Elevation (ft MSL) [(A) - (D)]	(F) Liner Elevation at Sump ** (ft MSL)	(G) Leachate Head on Liner at Sump (ft) [(E) - (F)](3)
LP-1		540.5		0.293			496.1	
LP-2		483.6		0.316			476.8	
LP-3		478.8		0.316			472.7	

DATE MONITORED: \_\_\_\_\_

COMMENTS: \_\_\_\_\_

MONITORED BY: \_\_\_\_\_

(1) Elevations based on information from site files.

(2) Factor determined based on estimated as-built sideslope of cell.

(3) Compliance level is one foot of leachate on the liner at each sump.

Note: Figures in Columns (D), (E), and (G) should be rounded to the nearest tenth.

## PUMP INSPECTION FORM

**COA FM-812 Landfill**  
**Semiannual Pump Operation and Maintenance Services**

Pump Location	Date	Times (24 hr clock)		System Item Condition Satisfactory?							Repairs Needed / Comments
		Start	End	Panel	Shut-off Valve	Safety Cable	Discharge Pipe/Hose	Air Line	Transducer/Level Alarm	Pump	
<b>Leachate Trench Wells</b>											
LW-01											
LW-02											
LW-03											
LW-04											
LW-05											
LW-06											
LW-07											
LW-08											
LW-09											
LW-10											
LW-11											
LW-12											
LW-13											
LW-14											
LW-15											
LW-16											
LW-17											
LW-18											
<b>Leachate Risers</b>											
LCR-01											
LCR-02											
LCR-03											
<b>Leachate Tanks</b>											
Tank A											
Tank B											
<b>Gas Extraction Wells</b>											
EW-01											
EW-04											
EW-17											
EW-21											
EW-40											
<b>Gas Condensate Sumps</b>											
CS-01											
CS-02											
CS-03											
CS-04											

Removal and cleaning of pumps not required

Prepared by SCS Field Services

Page 1 of 1



## PROBE/STRUCTURE MONITORING REPORT EXAMPLE

## SCS ENGINEERS AND FIELD SERVICES

March 17, 2017  
Project No. 07206081.16

Mr. Conley Leloux  
Waste Management Program Manager  
FM-812 Landfill  
City of Austin  
P. O. Box 1088  
Austin, Texas 78767

Subject: City of Austin – FM-812 Landfill  
Landfill Gas (LFG) Probe Monitoring Report – First Quarter 2017

Dear Mr. Leloux:

SCS Field Services (SCS-FS) is pleased to provide the City of Austin (COA) with this letter report of quarterly LFG probe monitoring conducted at the COA FM-812 Landfill (Site) during the first quarter of 2017. Provided below is a brief summary of monitoring results.

### SUMMARY OF PROBE, VENT, WELL, AND PIEZOMETER MONITORING RESULTS

Quarterly LFG probe, water line gas vent, groundwater monitoring well, and piezometer monitoring was performed at the Site on March 7, 9, and 17. During this monitoring, methane was detected in probe GP-17 at a concentration above the lower explosive limit (LEL) (i.e., 5 percent by volume in air). Methane was also detected in probe GP-6 but at a concentration below the LEL. Methane was not detected in any other probes, vents, wells, or piezometers. Due to exceedances of the LEL during the second quarter 2016 monitoring event, probes GP-6 and GP-17 have been monitored weekly since that event. This monitoring will continue until methane concentrations in both probes drop and remain below the LEL. Results of all routine quarterly monitoring of probes, vents, wells, and piezometers are enclosed.

Mr. Conley Leloux, Waste Management Program Manager  
March 17, 2017  
Page 2

## CLOSING

SCS-FS appreciates the opportunity to be of service to the COA on this project. Please contact Rusty Fusilier at telephone number (512) 750-5446 if you have any questions about this report.

Sincerely,



Joe Ortiz  
Project Superintendent  
**SCS FIELD SERVICES**



Rusty Fusilier, P.E.  
Project Manager  
**SCS FIELD SERVICES**

JO/RF:rf  
Enclosure

cc w/enclosure: Donald Hardee, COA  
Tony Davee, COA  
Ron Wilks, SCS-FS  
Julie Becker, SCS-FS  
Rebecca Graff, SCS-FS

**COA FM-812 Landfill**  
**Gas Probe, Vent, Well, and Piezometer Monitoring Summary**  
**for 1st Quarter 2017**

Sampling Location ID	Date	Time (24-hour clock)	CH <sub>4</sub> (% by vol)	CO <sub>2</sub> (% by vol)	O <sub>2</sub> (% by vol)	Balance Gas (% by vol)	Static Pressure (In. H <sub>2</sub> O)	Depth to Water (ft)	Comments
<b>Calibration</b>									
Calibration	3/7/2017	11:06	0.0	0.1	21.0	78.9	NA	NA	
Calibration	3/7/2017	11:08	14.9	15.0	0.1	70.0	NA	NA	
Calibration	3/9/2017	16:51	0.0	0.1	20.9	79.0	NA	NA	
Calibration	3/9/2017	16:53	15.0	15.1	0.0	69.9	NA	NA	
Calibration	3/17/2017	11:11	0.0	0.1	21.1	78.8	NA	NA	
Calibration	3/17/2017	11:14	14.9	14.9	0.1	70.1	NA	NA	
<b>Gas Monitoring Probes</b>									
GP-04R	3/7/2017	12:15	0.0	0.9	10.2	88.9	0.0	Dry	
GP-05	3/7/2017	12:25	0.0	0.5	19.4	80.1	0.0	22.50	
GP-06	3/9/2017	17:01	0.7	9.2	4.5	85.6	-0.1	29.60	
GP-09	3/9/2017	17:14	0.0	5.1	15.5	79.4	0.0	Dry	
GP-09A	3/9/2017	17:17	0.0	0.1	21.1	78.8	-0.1	25.00	
GP-09B	3/7/2017	13:48	0.0	0.2	21.4	78.4	0.0	25.00	
GP-10	3/7/2017	14:17	0.0	0.1	21.7	78.2	0.0	7.60	
GP-10A	3/7/2017	14:21	0.0	0.1	21.6	78.3	0.0	23.60	
GP-10B	3/7/2017	14:23	0.0	0.1	21.6	78.3	0.0	23.60	
GP-11	3/7/2017	14:44	0.0	0.2	21.5	78.3	-0.1	Dry	
GP-12	3/7/2017	14:53	0.0	0.2	20.9	78.9	0.0	NA	
GP-17	3/9/2017	17:08	27.3	24.9	5.1	42.7	0.4	Dry	
GP-18	3/9/2017	17:29	0.0	0.7	17.8	81.5	0.2	15.99	
GP-19	3/17/2017	12:03	0.0	3.1	18.3	78.6	-0.1	10.25	
GP-20	3/17/2017	11:57	0.0	2.4	20.4	77.2	0.6	6.75	
<b>Water Line Vents</b>									
GP-21	3/7/2017	11:56	0.0	0.2	21.2	78.6	0.0	NA	
GP-22	3/7/2017	11:44	0.0	0.2	21.3	78.5	0.0	NA	
<b>Groundwater Monitoring Wells / Piezometers</b>									
MW-01	3/7/2017	12:06	0.0	0.1	21.4	78.5	0.0	NA	
MW-02	3/7/2017	15:16	0.0	0.1	21.5	78.4	0.0	NA	

**COA FM-812 Landfill**  
**Gas Probe, Vent, Well, and Piezometer Monitoring Summary**  
**for 1st Quarter 2017**

Sampling Location ID	Date	Time (24-hour clock)	CH <sub>4</sub> (% by vol)	CO <sub>2</sub> (% by vol)	O <sub>2</sub> (% by vol)	Balance Gas (% by vol)	Static Pressure (In. H <sub>2</sub> O)	Depth to Water (ft)	Comments
MW-03R	3/7/2017	12:36	0.0	0.4	20.8	78.8	0.0	NA	
MW-06	3/7/2017	13:28	0.0	0.4	18.7	80.9	0.0	NA	
MW-12	3/7/2017	13:18	0.0	0.5	18.5	81.0	0.0	NA	
MW-13	3/7/2017	13:33	0.0	0.6	20.5	78.9	0.0	NA	
MW-14	3/7/2017	13:43	0.0	0.2	21.2	78.6	0.0	NA	
MW-15	3/7/2017	14:30	0.0	0.2	21.5	78.3	0.0	NA	
MW-16	3/7/2017	13:57	0.0	0.1	21.9	78.0	0.0	NA	
MW-17	3/7/2017	13:14	0.0	0.3	20.0	79.7	0.0	NA	
MW-18	3/7/2017	13:02	0.0	0.7	20.6	78.7	0.0	NA	
MW-19	3/7/2017	14:48	0.0	0.5	20.9	78.6	0.0	NA	
MW-20	3/9/2017	17:24	0.0	1.4	21.2	77.4	0.0	NA	
MW-21	3/7/2017	13:38	0.0	0.2	20.9	78.9	0.0	NA	
PZ-01/MW-07	3/7/2017	12:31	0.0	0.4	21.2	78.4	0.0	NA	
PZ-02/MW-08R	3/17/2017	12:16	0.0	1.6	20.7	77.7	0.0	NA	
PZ-03/MW-09	3/17/2017	12:33	0.0	0.6	21.4	78.0	0.0	NA	
PZ-04/MW10R	3/7/2017	12:55	0.0	4.6	9.1	86.3	0.1	NA	
PZ-05/MW-11	3/7/2017	13:09	0.0	0.2	20.7	79.1	0.0	NA	
PZA	3/17/2017	12:36	0.0	0.2	21.4	78.4	0.0	NA	

Indicates exceedance of regulatory limit for methane for probe, well, or vent (i.e., 5% by volume in air).

Daily Weather Conditions	Date	Time	General Conditions	Barometric Pressure (inHg)	Temp. (° F)	Wind	
						Speed (mph)	Direction
Start	3/7/2017	11:05	Cloudy	30.15	67	23	North
End	3/7/2017	15:20	Cloudy	30.15	69	22	North
Start	3/9/2017	16:45	Cloudy	30.01	78	10	South
End	3/9/2017	17:30	Rainy	30.05	72	16	South
Start	3/17/2017	11:10	Cloudy	30.14	71	20	South
End	3/17/2017	12:40	Cloudy	30.13	75	20	South

Technician(s): Tim Gutierrez (3/7/17); Rusty Fusilier (3/9/17 & 3/17/17)

## SITE-SPECIFIC HEALTH AND SAFETY PLAN EXAMPLE



# Site-Specific Health and Safety Plan

## FM-812 Landfill/07206081.XX

### Rev. 0 – December 2, 2014

REQUIRED APPROVAL			
SCS OSHC or designee:		Date:	12/2/2014
SCS PM:		Date:	12/2/2014

Project No.:	07206081.XX
Project Name:	FM-812 Landfill OM&M Services
Site Address:	10108 FM-812 Austin, TX 78719
Client Contact:	Conley Leloux, City of Austin

EMERGENCY TELEPHONE NUMBERS	
Fire:	Austin Fire Department, 512-974-0130
Police:	City of Austin Police Department, 512-974-5253
Hospital	Brackenridge Hospital, 512-324-7000
Ambulance:	911
The directions and information on the nearest hospital are found on Page 2.	

Offices Nationwide  
[www.scsengineers.com](http://www.scsengineers.com)

**ACKNOWLEDGEMENT PAGE**

"I have read the attached Health and Safety Plan for FM-812 Landfill dated December 2, 2014. I have discussed any questions and/or concerns that I have regarding the contents of this document with the designated SCS project safety representative, and I understand its requirements."

Name	Signature	Company	Date
Dustin Ortiz		SCS	12/4/14
Rocky Morrison		SCS	12/4/14
Timothy Cuthbert		SCS	12/4/14
Joshua Scarbrough		Tech USA	12/4/14
Jason Lewallen		SCS	12/4/14

**ACKNOWLEDGEMENT PAGE**

“I have read the attached Health and Safety Plan for FM-812 Landfill dated December 2, 2014. I have discussed any questions and/or concerns that I have regarding the contents of this document with the designated SCS project safety representative, and I understand its requirements.”

<b>Name</b>	<b>Signature</b>	<b>Company</b>	<b>Date</b>

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## 1 INTRODUCTION

At SCS, protection of human health and the environment is paramount. This Site-Specific Health and Safety Plan (SSHSP) provides information to identify hazards that may be present and/or introduced by project's activities onto SCS job sites, and details needed precautions that employees should follow to protect themselves. Tasks performed on site or during projects should be analyzed to determine if physical or chemical hazards requiring safeguards or additional Personal Protective Equipment (PPE) exist. This plan will be modified as necessary if any new hazards are identified during the project that require that additional safeguards be put in place.

## PROJECT ORGANIZATION

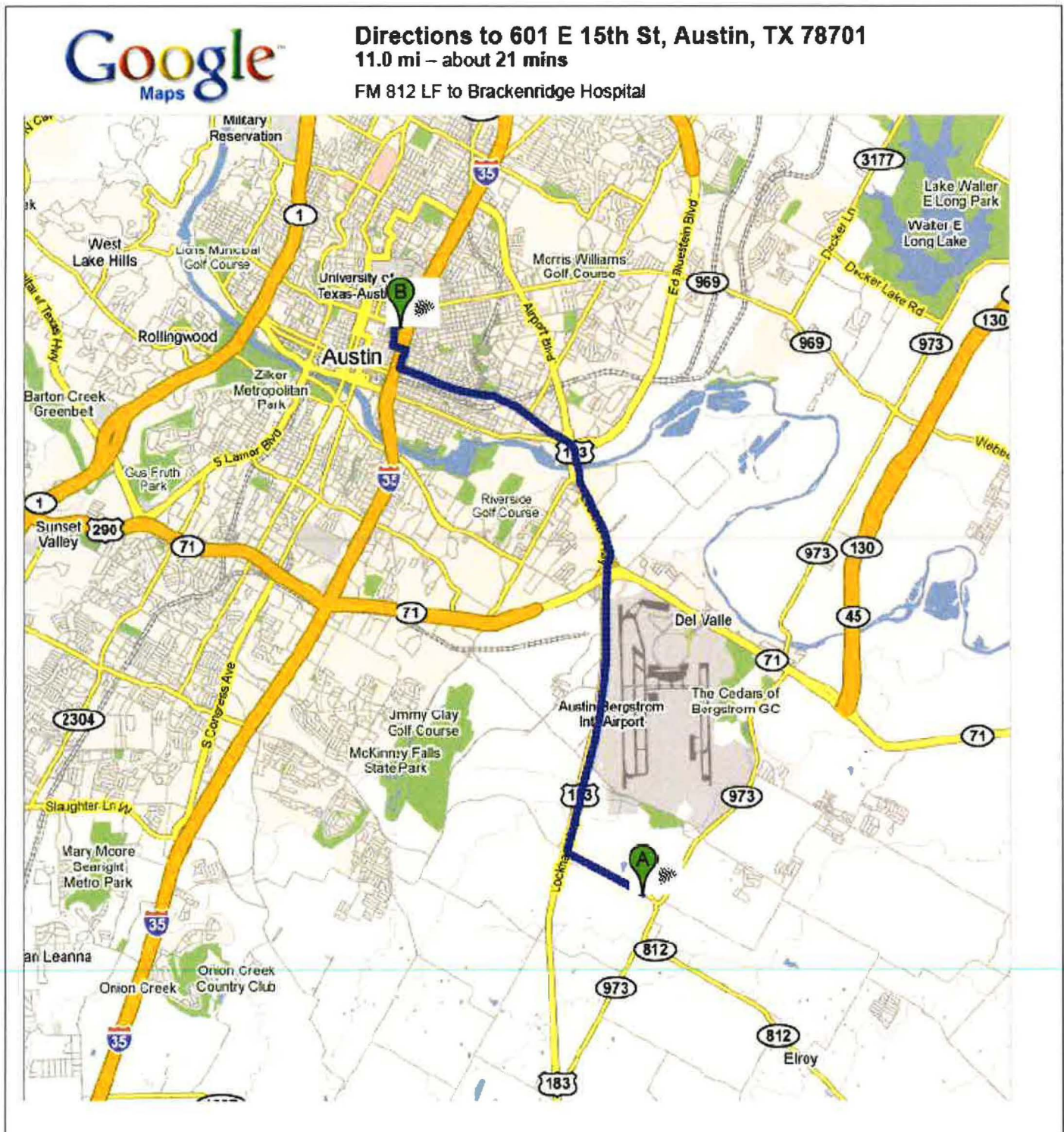
Project Manager or Site Team Leader:	Rusty Fusilier	512-750-5446
Primary Health and Safety Representative:	Sterling Kenyon	817-480-4080
On-site Health and Safety Representative:	Joe Ortiz	972-670-8161
Project Director:	Ron Wilks	817-235-4608
Client Representative:	Conley Leloux	512-243-3325

## SCOPE OF WORK

Perform routine and non-routine operations, monitoring, and maintenance (OM&M) of the landfill engineering systems. These systems include the landfill gas collection and control system (GCCS) and leachate collection system (LCS). Primary tasks include the monitoring of landfill gas collection wells and the blower/flare station and repair of various pipes and pumps related to the GCCS and LCS. The installation of new or replacement components to the landfill engineering systems may also be performed. These tasks may include emergency work.

## 2 EMERGENCY RESPONSE AND MEDICAL TREATMENT PROCEDURES

### EMERGENCY CONTACT AND NOTIFICATION INFORMATION







**10108 FM 812  
Austin, TX 78719**

- |   |                            |
|---|----------------------------|
| 1. Head <b>northwest</b> on <b>812</b> toward <b>Creedmoor Dr</b><br>About 2 mins                     | go 1.2 mi<br>total 1.2 mi  |
| → 2. Turn <b>right</b> at <b>US-183</b><br>About 8 mins   | go 5.9 mi<br>total 7.1 mi  |
| 3. Continue straight onto <b>E 7th St/Airport Blvd</b><br>Continue to follow E 7th St<br>About 7 mins | go 3.1 mi<br>total 10.2 mi |
| → 4. Turn <b>right</b> at <b>I-35/I 35 Service Rd N</b><br>About 1 min                                | go 0.3 mi<br>total 10.4 mi |
| ← 5. Turn <b>left</b> at <b>E 11th St</b><br>About 1 min  | go 0.2 mi<br>total 10.6 mi |
| → 6. Turn <b>right</b> at <b>Red River St</b><br>About 1 min  | go 0.3 mi<br>total 10.9 mi |
| → 7. Turn <b>right</b> at <b>E 15th St</b>  | go 377 ft<br>total 11.0 mi |



**601 E 15th St  
Austin, TX 78701**

**Figure**

### 1. Map to the Hospital and Directions

#### Nearest Hospital Address:

**Brackenridge Hospital  
601 East 15<sup>th</sup> Street  
Austin, TX 78701  
512-324-7000**

## ACCIDENT OR INCIDENT REPORTING SYSTEM

In the event of an emergency at the site, project personnel should call 911 for emergency assistance. After the immediate emergency situation has been addressed by emergency personnel, SCS project personnel should call the SCS Project Manager and the Client Representative and inform them of the situation. The Project Manager should evaluate the nature of the emergency and direct project personnel actions from that point.

## NOTIFICATION PROCEDURES FOR INCIDENTS (CLIENT, LOCAL, STATE, OR FEDERAL)

Site personnel should contact their supervisor immediately when an accident or injury occurs, and provide any needed information so that additional notifications can be determined and completed as needed.

## METHODS TO SUMMON EMERGENCY RESPONSE TEAM

Emergency services can be summoned through 911, as this service is active in the area.

## RESCUE AND MEDICAL TREATMENT REQUIREMENTS

Stop work authority should be exercised when an injury or accident occurs. The appropriate emergency agency should be contacted and first aid administered, if possible. Contact Sterling Kenyon as soon as possible as well. If the injury is not life-threatening and does not require emergency response, contact WorkCare at (800) 455-6155. First aid kits and fire extinguishers are available in each SCS work truck. Additional first aid or medical support is available at the site FM-812 Landfill.

## SITE EMERGENCIES

In the event of a site emergency, natural disaster or severe weather event, all personnel should evacuate the work area and meet at the site office building located near the main entrance. If the office maintenance building is unsafe, meet in the parking area. In the event of an emergency at the site, project personnel should call 911 for emergency assistance.

## 3 SITE DESCRIPTION

### LOCATION DESCRIPTION

The facility is located at 10108 FM-812 Austin, TX 78719.

## 4 GENERAL FIELD SAFETY PROCEDURES

General Standard Operating Procedures (SOPs) and additional SCS Health and Safety procedures and requirements are included in the current SCS Injury Illness Protection Program (IIPP) and on the SCS intranet. These documents are considered a part of this plan.

### APPLICABLE STANDARD OPERATING PROCEDURES (SOPS) AND PROGRAMS

	SOP Number and Name		SOP Number and Name
X	01 - General Code of Safe Work Practices	X	22 - Safe Procedures for Working with Sites That Contain Hydrogen Sulfide
X	04 - JTSA and PPE Assessment Procedures	X	24 - Avoidance of Slips, Trips, and Falls
	05 - Work Permits	X	25 - Avoidance and Prevention of Heat and Cold Stress, and Other Weather-Related Hazards
X	06 - Forklift and Heavy Machinery Operations	X	26 - All-Terrain Vehicles and Watercraft
X	07 - Compressed Air and Compressed Gas Cylinders		27 - OSHA and Other Regulatory Inspections

	SOP Number and Name		SOP Number and Name
X	08 - Drilling and Well Installation Procedures		
X	09 - Electrical Safety		<b>Appendix Letter and Program Name</b>
X	10 - Fall Protection	X	B - Hazard Communication
X	11 - Fire Extinguishers		C - HAZWOPER
X	12 - Hand and Power Tools		D - Exposure Assessment
X	13 - Working Safely with Ladders	X	E - PPE Other Than Respiratory Protection
X	14 - Landfill Leachate and Condensate Safe Procedures		F - Respiratory Protection
X	15 - Lockout and Tagout	X	G - Motor Vehicle and Fleet Safety
X	17 - Materials Use and Handling	X	H - Hearing Conservation
X	18 - Polyethylene (PE) Pipe Work Safe Procedures	X	I - Bloodborne Pathogens
X	19 - Site Sanitation Procedures	X	J - Excavation and Construction Earthwork Program
	20 - Safe Work Practices for Scaffolds		K - Confined Space Entry
X	21 - Safe Procedures for Biological Hazards (Snakes, Insects, Vegetation, Bacteria)	X	L - Ergonomics Program

## JOB TASK SAFETY ANALYSIS (JTSA) AND PPE ASSESSMENT

JTSAs for activities performed at this site have been completed as indicated below and are included in **Appendix 1**. A completed JTSA is required for all work tasks performed at the site. **JTSAs are designed to identify steps which involve potential hazards to employees and should be reviewed and understood (and signed providing evidence of understanding) before performing any task at the site. If additional steps or hazards are present, the JTSA should be revised (and the revision signed by all affected staff) to indicate that all items have been appropriately addressed and are understood before proceeding with the task.**

Unless identified in an attached Job Task Safety Analysis (JTSA) form, all project tasks are anticipated to only require **Level D** PPE, as defined by the Occupational Safety and Health Administration (OSHA). Prior to working in a Level C or B environment, each employee is required to be medically qualified (by an approved SCS medical provider) and properly fit-tested for the needed respiratory protection defined in this plan. The projects designated will ensure that this is completed per SCS policy, with assistance, as needed, from the SCS Corporate Health and Safety Director (CHSD). IN ADDITION, ANY EMPLOYEE WORKING AT A SITE AS DEFINED IN 29 CFR 1910.120 (or applicable state OSHA standard) OR REQUIRED BY



CONTRACT SHALL BE TRAINED IN ACCORDANCE WITH 29 CFR 1910.120(e) (24-hour or 40-hour HAZWOPER, as appropriate). Each employee will only perform tasks that they have been properly trained to perform. A copy of each employee's training record is available through the SCS OSHC or designee.

### Site-Specific JTSA List

X	JTSA-1 Drain Liquid from Laterals	X	JTSA-17 Sump or Condensate Sump Pump Repair
X	JTSA-2 Excavation & Backfilling		JTSA-18 Surface Emissions Monitoring
X	JTSA-3 Extrusion Welding	X	JTSA-19 Use of Down-Well Cameras
X	JTSA-4 Flame Arrestor and Flare Repairs	X	JTSA-20 Vehicle Operations
X	JTSA-5 Flare System Monitoring	X	JTSA-21 Well Drilling
X	JTSA-6 Heavy Equipment Use		JTSA-22 Confined Space Entry
	JTSA-7 Leachate Tank Cleaning	X	JTSA-23 Troubleshoot/Repair Electrical Panels
X	JTSA-8 LFG Extraction Well/Probe/Structure Monitoring		JTSA-24 Flare Installation/Replacement
X	JTSA-9 Liquid Measurements in LFG Extraction/Leachate		JTSA-25 Sump Installation/Replacement
X	JTSA-10 Non-Routine LFG Collection System Piping Repairs	X	JTSA-26 Blower Installation/Replacement
	JTSA-11 Perform Draeger Tube Sampling	X	JTSA-27 Pump Installation/Replacement
X	JTSA-12 Raise/Lower LFG Collection System Extraction Wells	X	JTSA-28 Header/Lateral Install/Replacement
X	JTSA-13 Remove/Install Dewatering Pump in Extraction Well		JTSA-29 Gas Sensor Installation/Repair
X	JTSA-14 Repair Dewatering Pumps in LFG Extraction Wells		JTSA-30 Mowing/Landscaping Activities
	JTSA-15 Sample Collection (Groundwater/Leachate)	X	JTSA-32 Leachate Tank Pump Station Monitoring
X	JTSA-16 Sample Collection (Summa Canisters, Tedlar Bags)		JTSA-33 Flare Station SCADA System Precautions

### SAFE OBSERVATIONS

The SCS SAFE Observation Checklist will be used by field and project personnel. The goal is to make at least one (1) documented observation per quarter during site activities.

## OTHER INSPECTION PROCEDURES

Periodic site inspections may be made by the CHSD, Project Supervisor, Project Manager, and Regional Compliance Auditor or Safety Specialist. There is also the potential for the client or regulatory agencies to visit and inspect the site. SCS personnel are to perform tasks in compliance with all contractual, regulatory, and company requirements at all times.

## SITE CONTROL

Our clients are responsible for providing SCS employees with safe site access, which includes sites that are free of threats from transients or other aggressive people or dogs. If an SCS employee encounters an aggressive person or dog, they should withdraw from the site and contact the Site Representative and their SCS supervisor. The Site Owner is responsible for removing the threats, and SCS employees should not take any affirmative action of their own.

## HOUSEKEEPING REQUIREMENTS

The supervisor's office/employee break room, both located near the facility entrance, can be used by project personnel for sanitary purposes. SCS employees should provide their own drinking water for the duration of their work at the facility. Smoking is prohibited on the landfill except at designated areas as specified by the client representative.

## AIR MONITORING

### **Monitoring Equipment and Exposure Limits**

A direct-read multi-gas-monitor that measures combustible gas, oxygen, hydrogen sulfide, and carbon monoxide is required for SCS employees performing work at landfills. Additional monitoring may be required when confined space entry work is being performed. If the atmosphere at any area is unsafe, entry into that area will not be permitted until the area is ventilated such that the atmosphere becomes safe.

Monitoring for toxic gases other than hydrogen sulfide and carbon monoxide will not be performed at this project site unless there is reason to believe that toxic compounds or materials may be present in unsafe concentrations. It is expected that toxic gas levels at this project site will be below action levels if the measured atmospheric parameters stated in **Table 1, Chemical Hazards and Air Monitoring Plan**, are tested and determined to be safe.

**Table 1. Chemical Hazards and Air Monitoring Plan**

Chemical/ Parameter	PEL	TLV	IDLH	Action Level	Monitoring Equipment	Sample Location and Frequency	Procedures When Action Levels Exceeded
Oxygen	19.5% to 23.5% accepted range	NA	NA	<19.5 & >23.5	Four-gas personal monitor	<p>Before entry, at breathing level, in each space where potential for chemical hazards exist.</p> <p>Examples include manholes, vaults, enclosed flares, trenches and in the vicinity of open piping or wells.</p> <p><b>Use the personal four-gas meter at all times while on site.</b></p>	<p>Exit the area in an upwind direction and/or ventilate until levels fall below Action Level before reentering.</p> <p><b>Warning:</b> Follow Confined Space Entry procedures where appropriate.</p> <p><b>Caution:</b> Follow respiratory protection procedures to include fit testing and required medical exams when respiratory protection is used.</p>
Methane	NA	1,000 ppm TWA (for aliphatic hydrocarbon gases)	50,000 ppm (100% of LEL)	>10% LEL	Four-gas personal monitor		
Carbon Monoxide	25 ppm TWA 200 ppm CEILING	125 ppm STEL	1,200 ppm	100 ppm	Four-gas personal monitor		
Hydrogen Sulfide	20 ppm CEILING	1 ppm TWA 5 ppm STEL	100 ppm	10 ppm	Four-gas personal monitor		
Flammable and explosive gases	NA	NA	100% of LEL		Four-gas personal monitor		
Methyl Mercaptan	0.5 ppm TWA 10 ppm CEILING	0.5 ppm TWA	150 ppm				
Benzene	1 ppm TWA 5 ppm STEL	0.5 ppm TWA 2.5 ppm STEL	500 ppm				
Chloroethene (Vinyl Chloride)	1 ppm TWA 5 ppm STEL	1 ppm TWA					
1,2 Dibromomethane (Ethylene Dibromide)	20 ppm TWA 30 ppm CEILING 50 ppm maximum peak above ceiling for 5-minute period in 8 hours	A3 carcinogen	100 ppm				
Dichloromethane (Methylene Chloride)	25 ppm TWA 125 ppm STEL	50 ppm TWA	2,300 ppm				



Chemical/ Parameter	PEL	TLV	IDLH	Action Level	Monitoring Equipment	Sample Location and Frequency	Procedures When Action Levels Exceeded
Tetrachloroethylene (Perchloroethylene)	100 ppm TWA 200 ppm CEILING 300 ppm maximum peak above ceiling for 5-minute period in any 3 hours)	25 ppm TWA 100 ppm STEL	150 ppm				
Tetrachloromethane (Carbon Tetrachloride)	10 ppm TWA 25 ppm CEILING 200 ppm maximum peak above ceiling for 5-minute period in any 3 hours)	5 ppm TWA 10 ppm STEL	200 ppm				
1,1,1-Trichloroethane (Methyl Chloroform)	350 ppm TWA	350 ppm TWA 450 ppm STEL	700 ppm				
Trichloroethylene	100 ppm TWA 200 ppm CEILING 300 ppm maximum peak above ceiling for 5-minute period in any 2 hours	10 ppm TWA 25 ppm STEL	1,000 ppm				
Trichloromethane (Chloroform)	50 ppm CEILING	10 ppm TWA	500 ppm				

**Table Key:**

**PEL:** OSHA (most stringent state OSHA value). Permissible Exposure Limits are specified legal employee exposure limits based on specified lengths of time (see Ceiling, TWA, and STEL).  
**TLV:** Threshold Limit Values (TLV's) are guidelines (not standards) prepared by the American Conference of Governmental Industrial Hygienists, Inc. (ACGIH), to assist industrial hygienists in making decisions regarding safe levels of exposure to various hazards found in the workplace.  
**IDLH:** An atmosphere that poses an immediate threat to life would cause irreversible adverse health effects, or would impair an individual's ability to escape from a dangerous atmosphere.  
**TWA:** Time-Weighted Averages are the upper limit of a toxic material to which an average person in average health may be exposed on a day-to-day basis (40-hour work week, 8-hour work periods) with no adverse health effects.  
**STEL:** Short-Term Exposure Limit is the maximum average chemical concentration in which an employee can be exposed for up to 15 minutes. At no time can the employee exposure concentration exceed the "Ceiling" limit.  
**Ceiling:** The maximum instantaneous chemical concentration in which an employee can be exposed to at any time.  
**%:** Percent gas by volume.  
**% LEL:** Percent of the lower explosive limit.  
**PPM:** Parts per million.

Note: Instrument alarm levels and required responses are defined in TSOP 207.

## 5 SITE HAZARDS

### Chemical and Physical Agent Hazards

The following chemical and physical hazards should be considered before performing any task or work at the site. The analysis will depend on a thorough understanding of the site's physical characteristics and the task(s) being performed.

**Landfill Gas:** Landfill gas (LFG) varies from one site to another. LFG consists primarily of methane (about 55 percent) and carbon dioxide (about 45 percent). Other components that may be present include water vapor, nitrogen, carbon monoxide, hydrogen sulfide, and other toxic compounds. LFG is flammable and potentially explosive.

**Methane (CH<sub>4</sub>):** Methane gas is produced at landfills from the decomposition of waste. Methane is a colorless, odorless, flammable, and potentially explosive gas. The flammable range of methane is 5 to 15 percent by volume. Methane is a simple asphyxiate as it is capable of displacing oxygen. Personnel should wear an oxygen monitor when working in any area where gas may be present. **Table 1, Chemical Hazards and Air Monitoring Plan** (below), contains additional information about specific chemicals of concern at this site.

**Toxic Compounds:** Non-Methane Organic Compounds (NMOCs), as well as inorganic toxic contaminants such as mercury, and sometimes even radioactive contaminants such as tritium, may be present on a site. NMOCs include such toxic compounds as benzene, toluene, chloroform, vinyl chloride, carbon tetrachloride, and trichloroethane, which, although less than 1 percent by weight, are hazardous. These potential hazards should be evaluated on a case-by-case basis. Additional precautions will be established as needed in this plan.

**Hydrogen Sulfide (H<sub>2</sub>S):** Varies by site, but is typically present between 10 and 200 parts per million (ppm). Hydrogen sulfide can accumulate in low areas such as sumps, holes, ditches, or depressions. Hydrogen sulfide is a primary hazard in confined space entry. Personnel should wear an H<sub>2</sub>S monitor to alarm when working in any area where gas may be present.

**Leachate:** The generation of leachate is caused mostly by precipitation. Once water percolates through waste, it reacts with the products of decomposition, chemicals, and other materials to produce leachate. Risks from waste leachate are due to its high organic contaminate concentrations and high ammoniacal nitrogen. Pathogenic microorganisms and toxic substances from waste are also health concerns. Methane and hydrogen sulfide may also be dissolved in the leachate. This could pose a concern in weakly ventilated areas where an explosion and/or exposure risk may develop. Workers should avoid direct contact with leachate. Where there is a risk of splashing, spilling, or spraying of leachate, appropriate measures should be taken to avoid contact with skin and eyes. These measures include wearing chemical protective goggles, face shield, gloves, apron, boots, or coveralls, as needed. In the event of direct contact, immediately remove any contaminated clothing and wash the affected area with soap and water. Ensure that all contaminated PPE and clothing are properly decontaminated. Avoid contact at all times.

**LFG Condensate:** LFG condensate is produced when LFG cools and moisture condenses from the vapor phase to the liquid phase. The condensate then collects in low points of the LFG



collection system. It generally contains elevated levels of heavy metals (e.g., chromium) and has a low pH (< 7.0). Pathogenic microorganisms and other hazardous substances can also be present. Methane and hydrogen sulfide may also be dissolved in condensate. This could pose a concern in weakly ventilated areas where an explosion and/or exposure risk may develop. Workers should avoid direct contact with condensate. Where there is a risk of splashing, spilling, or spraying of condensate, appropriate measures should be taken to avoid contact with skin and eyes. These measures include wearing chemical protective goggles, face shield, gloves, apron, boots, or coveralls, as needed. In the event of direct contact, immediately remove any contaminated clothing and wash the affected area with soap and water. Ensure that all contaminated PPE and clothing are properly decontaminated. Avoid contact at all times.

**Poisons:** Pesticides, cleaners, or other toxic materials of various types may be present in the waste at a landfill. Avoid contact with these items. Pay close attention to where you walk and what you touch such that materials do not accidentally come into contact with skin, eyes, mouth, or clothing. Immediately remove any contaminated clothing, and wash with hot soapy water any skin that becomes contaminated. Avoid contact at all times.

**Flammables:** Fuel such as gasoline and diesel may be present at a landfill. Additionally, paint thinners or other flammable materials may be present in the waste. The primary risk associated with these materials is fire. Keep all ignition sources away from flammable materials. Do not smoke, unless in designated areas. Pay close attention to where you walk and what you touch such that materials do not accidentally come into contact with skin, eyes, mouth, or clothing. Immediately remove any contaminated clothing, and wash with hot soapy water any skin that becomes contaminated. Avoid contact at all times.

**Oxidizers:** Fertilizers, pool chemicals, chlorine, or other oxidizers may be present at a landfill. These materials may be in use at water treatment plants or in the waste at the site. The primary risk from oxidizers is an increased fire potential. Keep fire and fuel or oil away from oxidizers. Do not smoke, unless in designated areas. Pay close attention to where you walk and what you touch such that materials do not accidentally come into contact with skin, eyes, mouth, or clothing. Immediately remove any contaminated clothing, and wash with hot soapy water any skin that becomes contaminated. Avoid contact at all times.

**Corrosives:** Acidic and caustic materials may be present at a landfill. These materials may be in use at water treatment plants or in the waste at the site. The primary risk from corrosives is damage to the skin or eyes. Pay close attention to where you walk and what you touch such that materials do not accidentally come into contact with skin, eyes, mouth, or clothing. Immediately remove any contaminated clothing, and wash with hot soapy water any skin that becomes contaminated. Avoid contact at all times.

## Physical Hazards

The following physical hazards should be considered before performing any task or work at the landfill. Depending on the task(s) being performed, any or all of these hazards may be present.

**Heavy Equipment:** Compactors, bull dozers, loaders, track hoes, forklifts and large trucks, and other vehicles are present at a landfill. Loud noise and limited visibility can increase the threat

of being run over or crushed by these vehicles. Wear high-visibility vests (recommend Class III) and coordinate with vehicle operators when working in the vicinity of these pieces of equipment. Heavy equipment hazards are especially present at or near the working face. When working in this area, equipment operators must be notified. These vehicles should not be operated within 50 feet of a person on foot. The use of a second person (as a spotter) should be done when working in this area. Only trained personnel should operate heavy equipment.

**High Pressure:** Gas or liquids in pipes or cylinders can pose hazards related to the pressure that may exist in the vessel. Any vessel or conveyance that has the potential to contain pressurized liquid or gas must be carefully evaluated before performing work. Do not cut or open a vessel or pipe until it is verified that the pressure has been released or eliminated. Wear proper protective equipment (safety glasses, face shield, gloves, apron, or coveralls) as needed to provide a barrier from contact with materials. The presence of flammable gas or liquids presents additional hazards from fire or explosion. All sources of ignition should be eliminated when working with these materials.

**Steep and Uneven Terrain:** Treacherous footing on slopes (i.e., sandy soil/clay), heavy equipment, or snakes and other animals that could be present on slopes or in bushes all present hazards at disposal sites. Walking, driving, or operating heavy equipment on steep hills or uneven terrain can be dangerous. These areas should be avoided whenever possible. When it is necessary to walk or drive in such locations, great care should be taken. Move slowly and be aware of loose materials or holes that could be present. Sharp items or spilled materials may also exist there and should be avoided. When traversing steep terrain, drive straight up or down slopes to reduce the possibility of roll over. Holes, pits, and ditches may be present. Falling or driving into these hazards can be avoided by becoming familiar with the site. Tall grass or vegetation can hide these features.

Do not drive on areas with which you are not familiar. Discuss access routes and hazards with site personnel. A good rule of thumb for driving is: "When in doubt—get out."

**Lakes and Ponds:** Water or leachate ponds and lakes may be present at landfill sites. Drowning can occur in only a few inches of water. The sides of ponds, lakes, and ditches containing water or leachate can be slippery. These areas should not be accessed unless necessary for tasks being performed. The use of approved flotation devices is required when working near any water body. A second person (buddy system) should be used when working in areas where water hazards are present.

**Electrical:** Electrical hazards at landfills fall into two categories. The first category includes underground or overhead electrical power lines that may be encountered. The location of all electrical power lines should be determined before any digging or excavation is performed. The presence of overhead electrical power lines should be determined so that contact with tall equipment (loaders, track hoes, etc.) can be prevented. Contracted locator services and/or physical protective measures (barriers or line covers) should be used as needed.

The second category of electrical hazard at landfills includes working on energized (powered) equipment or systems. Projects that may involve exposure to any form of hazardous energy, including electrical energy, must be performed in compliance with requirements described in



**SOP 9** (Electrical Safety) of the SCS Health and Safety Program Manual. Special care should be taken while working in wet areas where electrical power is present. Activities occurring in proximity with electrical power require that extreme caution be exercised to avoid accidental contact with pipes, ladders, tools, or body parts.

**Lightning:** The danger of lightning strike is increased when work occurs on the elevated surface of a landfill. Lightning can strike miles ahead of a storm when no rain is present. All operations should be stopped immediately when lightning is visible or thunder is audible. All personnel should seek shelter off the elevated surface of the landfill and remain inside a building (primary) or vehicle (secondary) until the danger passes. Do not take shelter near tall objects such as power lines, trees, antennas, or the flare stack. Work can resume when the lightning is no longer visible and the thunder cannot be heard.

**Heat-Related Injuries:** Elevated body temperatures can cause serious injury or death. Working outdoors or in the sun increases the chance of heat-related injuries. This hazard is especially critical when PPE (such as coveralls or rain gear) is worn, since heat from the body becomes trapped inside clothing. Personnel should drink plenty of liquids and take breaks as needed. The following describes the various **Heat Disorders and Health Effects:**

- **Heat Stroke:** This disorder occurs when the body's system of temperature regulation (e.g., sweating and evaporation) fails and body temperature rises to critical levels. The condition is caused by a combination of highly variable factors, and its occurrence is difficult to predict. Heat stroke is a serious hazard, however. Primary signs and symptoms are confusion, irrational behavior, loss of consciousness, convulsions, a lack of sweating (usually), hot, dry skin, and an abnormally high body temperature. If a worker shows signs of possible heat stroke, call 911 to obtain **immediate** medical assistance. The worker should be placed in a shady area, and his or her outer clothing should be removed. The worker's skin should also be wetted and air movement around the body increased to improve evaporative cooling until professional methods of cooling are initiated and the seriousness of the condition can be assessed. Fluids should be replaced as soon as possible--by mouth only if the worker is conscious. The medical outcome of an episode of heat stroke depends on the victim's physical fitness and the timing and effectiveness of first aid treatment. Regardless of the worker's protests, **no** employee suspected of being ill from heat stroke should be sent home or left unattended unless a physician has specifically approved such an order.
- **Heat Exhaustion:** The signs and symptoms of heat exhaustion include clammy skin, headache, nausea, vertigo, weakness, thirst, and giddiness. Fortunately, heat exhaustion responds readily to prompt treatment. This condition, however, should not be dismissed lightly, for several reasons. One is that fainting associated with heat exhaustion can be dangerous because the victim may be operating machinery or controlling an operation that should not be left unattended. The victim could also be injured when he or she faints. While the signs and symptoms associated with heat exhaustion are similar to those of heat stroke, the notable difference (with heat exhaustion) is clammy skin. Workers suffering from heat exhaustion should be

removed from hot environments and given fluid replacement, by mouth only if the workers are conscious. They should also be encouraged to get adequate rest.

- **Heat Rashes:** The most common problem occurring in hot work environments is heat rash. Prickly heat is manifested as red papules and usually appears in areas where the clothing is restrictive. As sweating increases, the papules give rise to a prickling sensation. Prickly heat occurs in skin that is persistently wetted by unevaporated sweat, and papules may become infected if they are not treated. In most cases, heat rash will disappear when the affected individual returns to a cool environment.
- **Heat Fatigue:** One factor that predisposes individuals to heat fatigue is the lack of acclimatization. Use of a program of acclimatization and training for work in hot environments are advisable. The signs and symptoms of heat fatigue include impaired performance of skilled sensorimotor, high-concentration, or high-vigilance activities. The sole treatment available for heat fatigue is to remove heat stress and increase fluid replacement before a more serious heat-related condition develops.

**Cold-Related Injuries:** In winter weather conditions, there is a potential for injury from cold, including dehydration, frostbite, heavy shivering, excessive fatigue, drowsiness, irritability, and euphoria. If workers show these symptoms, work should cease and affected personnel rest in heated buildings or vehicles.

### Biological Hazards

Rodents, poisonous insects, snakes, other animals and/or plants are a natural part of any ecosystem. They are sometimes difficult to eliminate or avoid on some landfill sites because those sites are rural and remote. Employees should be aware of the potential for encountering these types of animals and plants. Where possible, nesting places should be removed or access to them should be limited. If several infestations occur, remedies should be discussed with a supervisor and the client (see **SCS IIPP, SOP-21**, for precautions and treatment for biological hazards). The following could be encountered in performance of the operation, maintenance, and monitoring functions of a project:

**Hantavirus:** Infection typically occurs by the inhalation of tiny airborne droplets of fresh or dried rodent excretions. Transmission to humans may also occur through direct contact with rodents or rodent-contaminated materials, and ingestion of contaminated food or water is also a possible route of transmission. Sweeping or “shaking out” rodent-contaminated materials should be avoided unless performed using respiratory protection. The early symptoms of hantavirus disease are flu-like (fever, chills, muscle aches). For a very short period of time, the infected person starts to feel better. Then, within 1 to 2 days, he or she may develop shortness of breath. The disease gets worse quickly and leads to respiratory failure, a condition known as Hantavirus Pulmonary Syndrome (HPS). About half of all HPS patients experience these symptoms, which usually occur 1 to 5 weeks from contracting the illness.

**Lyme Disease:** A tick-borne bacteria that causes a range of debilitating symptoms (i.e., flu-like discomfort, joint pain, fatigue, headache, lack of concentration, facial paralysis). The most outstanding symptom of the disease is a bulls-eye rash from the tick bite. Personnel should



avoid areas known to harbor ticks, and use insect repellent containing DEET to limit the possibility of being bitten.

**Africanized Honey Bees:** This species of bee is aggressive and unpredictable. It responds quickly and stings in large numbers; senses threats from people or animals 50 feet or more from the nest; senses vibrations from power equipment 100 feet or more from the nest; swarms frequently to establish new nests; pursues an enemy 3 miles or more; and nests in small cavities and sheltered areas. Avoid areas known to contain bees.

**Snakes:** Rattlesnakes, vipers, and coral snakes are poisonous. Not all rattlesnakes give audible warning before they strike. Extra caution should be taken if tools or other materials are dropped in highly vegetated areas, around rocks, into stockpiles of pipe or other objects, or when walking through highly vegetated areas where visibility (of the ground) is limited. The most active times for rattlesnakes are morning, late afternoon, and early evening; however, encounters could happen at any time of the day. Walking loudly, shuffling feet, or making noise while working is recommended. Boots that reach mid-calf or snake guards are recommended, and all personnel should have leather work gloves.

### **Confined Spaces**

Although not anticipated at this landfill, on-site personnel may be required to enter confined spaces while performing work on this project. Entry into any confined space happens for the purpose of monitoring/testing, or installation, modification, or repair of pipe or equipment. Entry into confined spaces will be performed by qualified personnel trained in accordance with OSHA standards for work in confined spaces. If confined space entry work is required, all participants must comply with the requirements of **Appendix K, SCS Health and Safety Program Manual (Confined Space)**. The possible hazards associated with work in confined spaces may include:

- Engulfment/entrapment.
- Limited access and egress.
- Atmospheric hazards, including methane gas, hydrogen sulfide gas, or oxygen deficiency.

Personnel must follow all procedures outlined in the OSHA Confined Space Standard while performing work in confined spaces. These procedures include:

- Preparing a Confined Space Entry Permit (**Appendix B, Attachment E**).
- Posting Hazard Notice placards at the entrance of the confined space.
- Continuous monitoring of the confined space for methane gas, hydrogen sulfide gas, and oxygen deficiencies during work within the confined space.

## Excavation Hazards

SCS personnel may be required to enter excavated areas for the purposes of inspecting waste, or to perform other construction or maintenance activities. Excavation operations must comply with applicable state or federal OSHA standards and any applicable requirements defined in the project's contract. The following specific hazards may be encountered in the excavated areas:

- Limited access and egress.
- Cave-in/possible engulfment or entrapment.
- Sharp objects.
- Bloodborne pathogens.
- Explosive or toxic gases, including methane and hydrogen sulfide gas.
- Oxygen-deficient atmospheres.

As detailed above, in order to reduce the possibility of an accident related to excavation work, compliance with applicable state or federal OSHA standards is required; this includes, but is not limited to, Excavation Standards, including:

- Installing proper ladders or ramps in compliance with applicable state or federal OSHA-standards.
- Utilizing proper engineering techniques of sloping and/or shoring, as outlined in applicable state or federal OSHA standards.
- Wearing applicable OSHA-approved safety work boots, and leather work gloves when entering excavated areas.
- Monitoring for methane gas, hydrogen sulfide gas, and oxygen deficiency prior to and during entry into excavated areas.

Although the Threshold Limit Value (TLV) for methane is 1,000 ppm, entry into any excavated area will not be permitted if methane levels are detected at 10 percent LEL (0.5 percent methane gas by volume) or higher, due to the potential for fire or explosion. Hydrogen sulfide gas levels detected at 25 ppm by volume or higher, or oxygen levels detected at 19.5 percent by volume or lower, shall also preclude entry. All personnel must evacuate the excavated area if the above levels are detected. Personnel may not reenter the excavated area until safe gas levels are attained by ventilation or other means (see **Appendix J, SCS Health and Safety Program Manual**, for safe precautions and requirements for excavation safety).

## APPENDICES (AS APPROPRIATE)

**TAB 8**  
**COST PROPOSAL**

**CITY OF AUSTIN**  
**VERSION 2 Section 0600A - PRICE SHEET**  
**LANDFILL GAS COLLECTION SERVICES**  
**SOLICITATION NUMBER: RFP 1500 SLW3000**

**Special Instructions:** Offerors must use this Price Sheet to submit pricing. Be advised that altering the price sheet or taking exceptions to any portion of the solicitation may jeopardize acceptance of your Offer.

The quantities noted below are estimates and not a guarantee of actual volume. The City does not guarantee the purchase of the quantities listed, actual purchases may be more or less. Quantities are provided as a guide based on historical or anticipated usage. Order quantities will be as-needed and specified by the City for each order.

A bid of "0" (zero) will be interpreted by the City as a no-charge (free) item and the City will not expect to pay for that item. A bid of "no bid" or no response (space left blank) will be interpreted by the City that the Offeror does not wish to bid on that item. Be advised, a "no bid" or no response may be considered as non-responsive and may result in disqualification of the bid.

Prices offered on the price sheet shall be all inclusive of fees not expressly allowed in the scope of work. The Offeror shall not charge separately for administrative, overhead, per diem, and shipping or transportation costs (travel time, fuel surcharges, mileage, stop-fee, etc.) to deliver services or items to the Austin, Texas area. The Offeror shall provide all tools, labor, travel, and equipment necessary to perform the services required under this contract.

The City reserves the right to award a single contract based on overall low cost or multiple awards based on individual or categories/groups of specific line items, cost, or any criteria or combination deemed most advantageous to the City.

ITEM NO.	ITEM DESCRIPTION	REFERENCE SECTION IN 0600 SOW	ESTIMATED ANNUAL QTY	UNIT PRICE	EXTENDED PRICE
1	Monthly gas collection and control system operation and maintenance with reporting to include monitoring of the methane gas content per EPA Greenhouse Gas Reporting Rules	Section 3.1	12	\$ 3,750.00	\$ 45,000.00
2	Semi-annual leachate and gas collection and control system pump and sump operation and maintenance.	Section 3.3	2	\$ 2,625.00	\$ 5,250.00
3	Quarterly gas collection, control system operation, and maintenance meetings	Section 3.2	4	\$ 500.00	\$ 2,000.00
4	Non-routine service: re-monitoring of landfill gas control and collection system extraction wells	Section 3.5.A	52	\$ 1,100.00	\$ 57,200.00
5	Four monitoring service calls for the blower/flare station at times other than the monthly well field monitoring or a re-monitoring service call	Section 3.5.B	6	\$ 785.00	\$ 4,710.00
6	One repair of a broken valve (wellhead, isolation, etc.)	Section 3.5.C	8	\$ 3,000.00	\$ 24,000.00
7	Non-routine service: replace torn flex hose	Section 3.5.D	15	\$ 95.00	\$ 1,425.00
8	Two repairs to main header lines (10" HDPE or less)	Section 3.5.E	4	\$ 3,200.00	\$ 12,800.00
9	Trouble shoot any methane migration issues in the collection system, including migration from cell containment	Section 3.5.F	4	\$ 1,000.00	\$ 4,000.00
10	Gas flow meter calibrations, as needed	Section 3.5.G	1	\$ 3,300.00	\$ 3,300.00
11	Non-routine service: replace as needed the site glass (flex tubing)	Section 3.5.I	8	\$ 160.00	\$ 1,280.00
12	Monthly monitoring and leachate levels of three subtitle cells	Section 3.1	12	\$ 250.00	\$ 3,000.00
13	Quarterly probe/structure monitoring	Section 3.2	4	\$ 1,600.00	\$ 6,400.00
<b>TOTAL EXTENDED PRICE:</b>					<b>\$ 170,365.00</b>



**Additional Services (PRICING FOR THIS SECTION WILL NOT BE USED TO DETERMINE AWARD)**

This information will not be used in the evaluation of the pricing and is for informational purposes only. There is no guarantee of purchase.

ITEM NO.	ITEM DESCRIPTION	UNIT PRICE	UNIT
9	Non-routine/non-emergency hourly rate	\$ 150.00	Hour
10	Emergency Services hourly rate	\$ 200.00	Hour
11	Mobilization charges (if any) per occurrence	\$ -	Each
12	Potential engineering assistance with Landfill Gas to Energy system	\$ 10,000.00	Each
14	Methane Migration	\$ 333.00	Hour
15	Percent mark-up to/discount from Vendor's cost for parts	_____ % Discount or _____ 10 _____ % Mark-Up	
COMPANY NAME:		Stearns, Conrad, and Schmidt Consulting Engineers, Inc. (dba SCS Field Services)	
EMAIL ADDRESS:		rfusilier@scsfieldservices.com	

## ASSUMPTION AND CONDITIONS CONCERNING COST ESTIMATES

### ROUTINE / NON-ROUTINE LINE ITEMS

Item No.	Comments
1	Includes costs for monthly GCCS O&M services with reporting (Sec. 3.1) and annual GHG reporting costs (Sec. 3.4).
2	Accounts for inspection and documentation costs only. Repair costs will be performed as non-routine services.
3	Accounts for onsite meeting lasting two hours that is attended by Project Manager and Lead Technician (Sec. 3.6).
4	Accounts for remonitoring of 25% of LFG extraction wells and BFS by Lead Technician.
5	Accounts for remonitoring of BFS only. Assumes one half-day of troubleshooting of BFS issues by Lead Technician.
6	Assumes replacement of 8-inch isolation valve and stem on main header. Depth of valve limited to 5 feet. Work performed by two-person SCS-FS crew. Materials provided by SCS-FS. Excavation to be done by COA personnel using COA equipment.
7	Accounts for labor (Lead Technician) and material to replace hose (but not clamps) on one wellhead.
8	Assumes replacement of 10-foot section of 8-inch HDPE pipe using electrofusion couplings. Depth of pipe limited to 5 feet. Work performed by two-person SCS-FS crew. Materials provided by SCS-FS. Excavation to be done by COA personnel using COA equipment.
9	Accounts for one half-day of trouble shooting by Lead Technician to identify migration source with assistance as needed from Project Manager. May include monitoring of probes, wells, vents, etc., in vicinity as well as barhole probing to identify extent of migration. Excavation (if needed) to assist with investigation to be done by COA personnel using COA equipment.
10	Includes costs for replacement of site meter with rental meter; shipping of both meters to and from manufacturer (including insurance coverage); and factory calibration of meter. Calibration documentation will be provided to COA upon receipt from manufacturer.
11	Accounts for labor (Lead Technician) and materials to replace tube on one tank.
12	Accounts for measurement of levels in three leachate collection risers (i.e., LCR-1, LCR-2, and LCR-3).
13	Includes costs for quarterly probe/well/vent/structure monitoring of approximately 38 locations along with reporting of results. Does not account for follow-up monitoring required as result of exceedance of regulatory limit at a location.

### INFORMATIONAL PURPOSE ONLY LINE ITEMS

Item No.	Comments
9	Accounts for labor (Lead Technician), monitoring equipment, field equipment (generator and fusion), hand tools, and vehicle which might be required for typical monitoring and repair services (up to 6-inch HDPE pipe). Does not account for materials for repair work.
10	See prior comment.
11	Costs accounted for in other item costs.
12	Provided for budgeting purposes only as actual scope will determine services needed.
14	Accounts for key personnel (Project Manager at \$198/hour and Lead Technician at \$135/hour) expected to be directly involved in meetings to address methane migration issues. Field activities for trouble shooting methane migration issues covered under Item No. 9 of routine/non-routine line items.
15	Markup applicable to materials purchased for non-routine services not covered by routine/non-routine line items.



**TAB 9**

**PROPOSAL ACCEPTANCE PERIOD**

## Tab 9

### PROPOSAL ACCEPTANCE PERIOD

This proposal is valid for a period of one hundred and eighty calendar days subsequent to the RFP closing date.

## GOAL DETERMINATION REQUEST FORM

<b>Buyer Name/Phone</b>	Sandy Wirtanen 512-974-7711	<b>PM Name/Phone</b>	N/A
<b>Sponsor/User Dept.</b>	Austin Resource Recovery	<b>Sponsor Name/Phone</b>	Sydney Richardson 512-974-1899
<b>Solicitation No</b>	RFP 1500 SLW3000	<b>Project Name</b>	Landfill Gas Collection Services
<b>Contract Amount</b>	\$120,000/year	<b>Ad Date (if applicable)</b>	5/14/2018
<b>Procurement Type</b>			
<input type="checkbox"/> AD – CSP <input type="checkbox"/> AD – Design Build Op Maint <input type="checkbox"/> IFB – IDIQ <input checked="" type="checkbox"/> Nonprofessional Services <input type="checkbox"/> Critical Business Need <input type="checkbox"/> Sole Source* <input type="checkbox"/> AD – CM@R <input type="checkbox"/> AD – JOC <input type="checkbox"/> PS – Project Specific <input type="checkbox"/> Commodities/Goods <input type="checkbox"/> Interlocal Agreement <input type="checkbox"/> AD – Design Build <input type="checkbox"/> IFB – Construction <input type="checkbox"/> PS – Rotation List <input type="checkbox"/> Cooperative Agreement <input type="checkbox"/> Ratification			
<b>Provide Project Description**</b>			
The City of Austin, seeks Contractors qualified to provide greenhouse gas monitoring and services, all required reporting for leachate, methane gas collections, control system operations, regulatory guidance and expertise, maintenance, improvement, additional infrastructure, and repair services at the closed Austin Resource Recovery landfill located at 10108 FM 812, Austin, Texas 78719. This contract will also provide non-routine and emergency services for all associated components as needed and determined by the City			
<b>Project History: Was a solicitation previously issued; if so were goals established? Were subcontractors/subconsultants utilized? Include prior Solicitation No.</b>			
Previous solicitation was RFP SLW0503 without goals.			
<b>List the scopes of work (commodity codes) for this project. (Attach commodity breakdown by percentage; eCAPRIS printout acceptable)</b>			
98846 Landfill Services - 100%			
Sandy Wirtanen		5/1/2018	
<b>Buyer Confirmation</b>		<b>Date</b>	

\* Sole Source must include Certificate of Exemption

\*\*Project Description not required for Sole Source

<b>FOR SMBR USE ONLY</b>			
<b>Date Received</b>	5/1/2018	<b>Date Assigned to BDC</b>	5/1/2018
<b>In accordance with Chapter2-9(A-D)-19 of the Austin City Code, SMBR makes the following determination:</b>			
<input type="checkbox"/> Goals	% MBE	% WBE	
<input type="checkbox"/> Subgoals	% African American	% Hispanic	

## GOAL DETERMINATION REQUEST FORM

	% Asian/Native American	% WBE
<input type="checkbox"/> Exempt from MBE/WBE Procurement Program		<input checked="" type="checkbox"/> No Goals

## GOAL DETERMINATION REQUEST FORM

**This determination is based upon the following:**

- |  |   |
|--|---|
| <input type="checkbox"/> Insufficient availability of M/WBEs       | <input type="checkbox"/> No availability of M/WBEs                  |
| <input type="checkbox"/> Insufficient subcontracting opportunities | <input checked="" type="checkbox"/> No subcontracting opportunities |
| <input type="checkbox"/> Sufficient availability of M/WBEs         | <input type="checkbox"/> Sufficient subcontracting opportunities    |
| <input type="checkbox"/> Sole Source                               | <input type="checkbox"/> Other                                      |

*If Other was selected, provide reasoning:*

### MBE/WBE/DBE Availability

No available MBE or WBE's.

### Subcontracting Opportunities Identified

No subcontracting opportunities

Keisha Houston-McCutchin

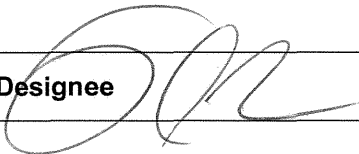
**SMBR Staff**



**Signature/ Date**

5/2/18

**SMBR Director or Designee**



**Date**

5-2-18

**Returned to/ Date:**